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When knowledges meet: Management and co-management of a declining salmon run in Subarctic Canada

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Summary

Dawson city is a small community located at the Northeast of Canada, just next to the Alaskan border. The city is most famous for the Klondike Gold rush that happened in 1896, however, indigenous people (in Canada called First Nations) have resided in the area for 10-15000 years. From the 1840s, non-First Nation people have arrived in Dawson, as miners, missionaries, adventurers, tourists and long-stay immigrants. Today, 2000 people live in Dawson, out of where 345 people are of First Nation origin, called the Tr'ondëk Hwëch'in.

Next to Dawson flows the Yukon River. Every summer, two salmon species swim from the Bering Sea in Alaska to Dawson to spawn in the same creek they were once hatched. Harvesting salmon has been important to the Tr'ondëk Hwëch'in since the beginning of time. It is still of great importance to the Tr'ondëk Hwëch'in today, as food and as part of their culture and identity. The non-First Nation people in Dawson have since the 1840s engaged in the salmon fishery in different ways: as fishers, as consumers or as fish plant employees. Out of the two runs, the favoured species for human consumption has been the one species, Chinook salmon. The other, Chum salmon, has mostly been fished to feed dogs. From the 1990s, the Chinook salmon run started to decline. In 2013, the run was expected to reach an all time low. The Chinook fishery was restricted, allowing only people of First Nation origin to fish for Chinook salmon.

In Dawson, views about salmon and salmon management differ whether a person belongs to the First Nation population, the non-First Nation population or is employed in the state bureaucracy. This thesis aim to investigate the different types of knowledges about salmon, asking the questions: What is a salmon? What is the proper relationship between humans and salmon? How should salmon be managed? The different knowledges have disparate relations to the processes of management and co-management of the Chinook salmon. The second half of the thesis aim to explore the meetings between the knowledges that occurred when people engaged in management and co-management. These meetings reveal structures of discursive power, as described by Michel Foucault (1980) and Eric Wolf (1989). Secondly, these meetings are examples of *non-meetings,* concerning the people who did not fit into co-management schemes and were not invited into the discussions and meetings regarding the management of Chinook salmon.

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Abbreviations

TEK	Traditional Ecological Knowledge
DFO	Department of Fisheries and Oceans
UFA	Umbrella Final Agreement
YRDFA	The Yukon River Drainage Fisheries Association
YSSC	Yukon Salmon Sub-Committee
YNB	Yukon Native Brotherhood

Chapter one: Introduction

"We harvested salmon since the beginning of time, it´s a crucial part of our diet, part of our identity and culture, our language."
Tr'ondëk Hwëch'in man

"Salmon is frustration."
Non-First Nation woman

"Instead of managing salmon, it is really about the management of human behaviour."
Employee from the Canadian Department of Fisheries and Oceans

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This thesis is about the salmon in the Yukon River, and the people connected to it through harvesting, cultural practices and management. For millennia, salmon has provided a rich source of food for the indigenous population residing next to the 3,190 kilometres that the Yukon River stretches along, from British Columbia, through Yukon and Alaska, before it flows into the Bering Sea. Today, salmon fishery is carried out within the context of the nation-states of Canada and the United States of America, and it is regulated by their legislation, management strategies and agreements with indigenous people, who are called "First Nations" in Canada.[1]

[1] "First Nation" has replaced "band" as the administrative term in Canada. "First Nations" apply to both indegenous

Dawson city and the Yukon River in 2013

My objective in this thesis is to describe and analyse the salmon fishery in one small city on the banks off the Yukon River while I was residing there with my husband and one year old daughter from February to September 2013. The ethnographic site is called Dawson City, which is located northwest in the Yukon Territory, just 70 kilometres from the Canada/US border. The city is situated where the Klondike River flows into the Yukon River, right next to what was a historical indigenous fish camp. Dawson occupies a remote location in the vast Canadian North. Apart from smaller villages, the nearest city, Whitehorse, is 600 kilometres away. Most people in Dawson, including First Nations and non-First Nations alike, rely on hunting and fishing for food security, either through harvesting it themselves or through the extended gifting of wild meat that takes place in the city. Dawson experiences a Subarctic climate, with long and cold winters and short, hot summers. Common animals in the area are bear, caribou, moose, beaver, rabbit, ptarmigan, raven, salmon, pike and grayling.

Human-Salmon Relations in Dawson

Out of the 2,000 people who live in Dawson, 385[2] of them are of First Nation origin, called the "Tr'ondëk Hwëch'in".[3] As was the case with 11 out of 14 First Nations in the Yukon Territory, the Tr'ondëk Hwëch'in signed their *Final Agreement* with the Canadian

[2] Yukon Bureau of Statistics, http://www.eco.gov.yk.ca/stats/pdf/populationSep_2013.pdf
[3] Many names have been used to describe the indigenous population in the Dawson area, like "The Hän Indians", "Dawson Indian Band" and "Moosehide Indians". I have throughout the text used the name "Tr'ondëk Hwëch'in", which is the name that the indigenous population in Dawson have used from 1997.

government in 1997.[4] The agreement secured the Tr'ondëk Hwëch'in the right to control their land and natural resources, like the salmon in the Yukon River.[5] They carry out this work together with representatives from the federal Department of Fisheries and Oceans (DFO), which holds the ultimate responsibility for managing the salmon in the Yukon Territory. The Yukon is a river runs through the territories of two nations. DFO manages the fishing in the river together with the Alaskan department of Fish and Game.

The Tr'ondëk Hwëch'in has a historical bond to the salmon that goes back 10-15,000 years.[6] Their name, *Tr'ondëk Hwëch'in*, roughly translates to "The people of the river". "Tró" refers to the hammerstones originally used to make fish traps at "Tr´ochëk", the historical fish camp located at the sound end of Dawson today. The name would convey to people that it was a good place to fish. For millennia, indigenous people set up their fish camp at "Tr´ochëk" to catch the salmon as it swam by on the way to reach their spawning grounds. In addition to the building of fish traps, people used dip nets or speared the salmon from their moose hide boats. Salmon provided them with important nutrition in an area located far away from the sea (Dobrowolsky, 2003: 8-10). Today, this special relationship lives on, revealed through a number of manifestations among the Tr'ondëk Hwëch'in in Dawson, like in their narratives about salmon, the use of salmon as festivity food, the norms that apply to salmon fishing and through other human-animal relations.

However, the Tr'ondëk Hwëch'in are not the only people with close ties to the salmon fishery in Dawson. Ever since the 1840s, Yukon has experienced immigration from other parts of Canada and the world. Because of the immensity of the Yukon River salmon run, there has normally been enough fish for everyone. After colonisation, through the different waves of settlement, non-First Nation peoples have been involved in the salmon fishery in different ways: as fishermen, as employees at the fish plant or as consumers. With the growth of the Canadian state and its governing apparatus since the end of the 19th Century due gold rushes, and subsequently the development of a Tr'ondëk Hwëch'in self-government starting in 1997, local people have also been involved in the management of salmon on different governmental levels, as either government employees or as members of different advisory committees.

[4] A Final Agreement is an agreement each Yukon First Nation can negotiante under the Umbrella Final Agreement from 1993.
[5] http://cyfn.ca/wp-content/uploads/2013/08/trondek-hwechin-fa.pdf
[6] Numbers vary depending on the source and the Carbon 14 method in use. See Dobrowolsky (2001).

Until around 1993, the Yukon River salmon run had been plentiful and in abundance. Since then, both locals and the DFO have agreed that the salmon has dropped dramatically, both in size and number. This decline continued every year until my arrival in 2013, when the salmon run was expected to reach an all time low. As a result, only people of First Nation origin were allowed to fish for salmon in 2013, in accordance with the *Final Agreement*, but even the First Nation fishery was limited.

Research Questions

As I will show throughout this thesis, views about salmon and salmon management differ sharply in Dawson. Differences in perspectives are based upon different understandings of what a salmon is and how it should be treated, and thus on how management and co-management schemes are planned and carried out. This thesis aims to investigate these differences by exploring the following questions: What is a salmon? What is the proper relationship between humans and salmon? How should the salmon be managed?

The disparate views on salmon are based upon different relationships to state power. In 1973, a Chief from every Yukon First Nation went to Ottawa with the document *Together today for our children tomorrow* to claim the involvement of First Nations in management of the land where they had resided for millennia. This event initiated a federal land claim negotiation process, resulting in the signing of the 1993 *Umbrella Final Agreement* (UFA). Based upon this framework each Yukon First Nation could negotiate its own *Final Agreement.* A First Nation Government could be established in each respective First Nation area, and as part of this institution, advisory committees that would contribute local knowledge into the management of natural resources (Dobrowolsky, 2003: 102-108).

This state-to-state relationship between the Canadian government and the First Nations government is often referred to as *co-management* (Nadasdy (2012), Cruikshank (2005). Co-management is thus an example of a meeting between different views on salmon in Dawson. Simultaneously, it can be an example of *non-meetings,* when views that do not correspond to the structures of co-management are excluded. The second focus of enquiry in this thesis is to empirically describe and analyse what happened in Dawson when the different views on salmon met and interacted, or when they failed to meet and interact and were rather eliminated and overlooked.

Knowledge

Views on salmon in Dawson have one thing in common: They are all based on a certain type of knowledge. Knowledge is thus the central concept of this thesis. The idea behind co-management is often to incorporate different types of knowledges or to make up a common knowledge through joint management and research efforts. However, as I will show in the following chapters, when writing about knowledge, one cannot get past the "intimate and inseparable" link it has to power relations, as Michel Foucault has pointed out (Foucault, 1980). When something is assigned the status of being "knowledge", power is always present in the process. One has to look at the process of something becoming knowledge to be able to speak about it (Foucault (1980), Nadasdy (2003), Cruikshank (2005)).

I will continue this chapter with a description of the three different types of knowledge I found in Dawson and a brief discussion of the nature and categorisation of the knowledges. I then turn to a theoretical discussion on knowledge to ask how knowledge becomes knowledge, and what might happen when different types of knowledge meet and interact. At the end of this chapter, I will provide a quick overview on the chapters in this thesis.

Knowledge in Dawson

Based on the salmon-human relations described above, I have found it useful to separate the knowledge in Dawson into three different categories.[7] First, there is what I will call the "Tr'ondëk Hwëch'in knowledge", that is, the knowledge held by the citizens in Dawson of Tr'ondëk Hwëch'in origin. Second, there is what I will refer to as the "Bureaucratic knowledge", which is the knowledge that is held by Canadian government representatives. Third, there is what I will refer to as the "Non-First Nation knowledge". This last category describes knowledge I was introduced to by the people in Dawson who were neither of First Nation origin nor government representatives.

The three different knowledges have different ties to salmon and salmon management in Dawson. Legislation and management strategies are largely based on bureaucratic knowledge. Indigenous knowledge, the Tr'ondëk Hwëch'in knowledge is, through co-management agreements, sought to both broaden the techno-scientific

[7] This separation does not mean that I hold these knowledges to be completely separate. The three categories of knowledge sometimes overlap and the people subject of each category consist of highly heterogenous groups. See also Ween (forthcoming) about forms of fluidity.

knowledge held by the state and to empower role of First Nation knowledge in Dawson. Thus, it is held to be a distinct entity that holds significance in Dawson. Finally, the Non-First Nation knowledge is often overlooked in the everyday discourse about salmon management in Dawson, and it is rarely a subject of categorisation in itself, or even thought of as a specific type of knowledge. In the following section, I will discuss the three different knowledges, and the problematic aspects they entail.

Indigenous Knowledge

Interest in indigenous knowledge around the world has increased in recent years, and especially after the Brundtland Commission report "Our Common Future" (1987) stressed the potential of indigenous knowledge to help maintain the Earth´s biodiversity whilst the Rio Convention (1992) provided global recognition to the importance of indigenous knowledge (Colombi, Ween (2013)). In the last three decades, indigenous knowledge has gradually been collected for inclusion in natural resources management in Canada (Menzies, 2006: 4). In the Yukon, the interest in indigenous knowledge was a direct consequence of the land claim negotiation process. This indigenous knowledge is often referred to as *Traditional Ecological Knowledge* or *TEK.*[8]

As anthropologist Paul Nadasdy argues in his book *Hunters and Bureaucrats* (2003), the usages of the term *Traditional Ecological Knowledge* are problematic for several reasons. First and foremost, Nadasdy stresses that none of the words included in the name have a counterpart in any indigenous language in the Yukon. According to Nadasdy, this fact reveals that the name *TEK* is a Euro-Canadian projection and expression of the newcomers' perception of the indigenous lifestyle, rather than accurately describing indigenous knowledges, worldviews or lifestyles. Secondly, Nadasdy is doubtful that the words included in the term *TEK* are useful for describing indigenous knowledges or worldviews at all (Nadasdy, 2003: 119-123). I will explore Nadasdy´s argumentation in turn after a brief look at the work of Julie Cruikshank.

The fact that indigenous knowledge is not frozen, but vivid, relational and serves as a response to impacts from the outside world is the focal point in the work of Julie Cruikshank (Cruikshank, 1981, 1990, 2005). In "Do Glaciers Listen?", she examines how indigenous knowledge is "produced during human encounters, rather than ´discovered´"

[8] Several other names have been applied by both First Nation people, anthropologists and Canadian bureaucrats, such as *Traditional Knowledge* (TK), *Traditional Local Knowledge* (TLK), *Local Knowledge* (LK), *Local Traditional Knowledge* (LTK) or *Local Ecological Knowledge* (LEK) (see for instance Menzies (2006), Nadasdy (2003), Cruikshank (1981). These names are all similar, however, *TEK* is most commonly used in the Yukon to describe indigenous knowledge.

(Cruikshank, 2005: 4). Through historical investigations from the Southern Yukon, Cruikshank explores how indigenous knowledge about the glaciers is shaped by the circumstances where it evolves, and, as a result, the knowledges that arise are often different and even contradictory. According to Cruikshank, human encounters not only influence the knowledge, they also bring biophysical and social change. She elaborated on this argument in her book "The Social Life of Stories" (1998). As the title indicates, she argues that indigenous stories (as told by three female Elders) are vivid and changeable, as a way for the storytellers to create meaning and order in a rapidly changing world (Cruikshank, 1998: xiii).

Despite Cruikshank´s argument, Nadasdy shows how *TEK* studies continue to solely focus on tradition, as there is a lack in the Yukon (in academic studies and management literature) of a "mining TEK", a "road TEK", and a "Facebook TEK", to push it to the extremes. The usage of the word "traditional" thus strips indigenous knowledge of the ability to change and relate to new circumstances, despite the fact that the historical events of the last 150 years has brought radical change to the Yukon (Nadasdy, 2003: 120).

The focus on "tradition" has led to a common understanding about indigenous knowledge and lifestyle in the Yukon, an understanding I encountered a number of times throughout my stay in Dawson. It was expressed through the notion of a struggle of "Indianness", what it actually meant to be “Indian.” As stated by one participant: "I am the only Indian left here" (he himself was of Euro-Canadian origin who lived off trapping). To be "Indian" to him meant to avoid modern inventions and use technology available in the pre-contact period. This argumentation, though mostly expressed less extremely, denies indigenous knowledge the ability to develop and the possibilities of change offered to other kinds of knowledge. The Tr’ondëk Hwëch’in rather perceive their "tradition" as a "living heritage", and does not differ sharply between "modern" and "traditional" knowledge.[9]

According to Nadasdy, the second word, "ecological", is further disruptive. It implies a differentiation between ecological and non-ecological that belongs to a Western mind set, often referred to as the "Cartesian divide" between mind and body, and culture and nature. In contrast, these differentiations make little or no sense in indigenous worldviews and cannot be used as analytical categories when applied to

[9] Yukon First Nations Heritage Management Framework, 2012: 3

indigenous knowledge. Rather, the world is perceived as connected, where humans are as much a part of nature as anything else, including a salmon, a bacteria or a spruce tree. A distinct divide between humans and animals does thus not apply. Many Tr'ondëk Hwëch'in elder stories describe animals that act as helpers to humans, and are considered to be very smart. For example, one story is about a ptarmigan that showed man how to make snow shoes. Other stories have to do with how humans and animals can appear as each other, like in the story of the beaver man or the salmon girl. To say that the indigenous world view is "ecological" is thus a misreading of the basic indigenous holistic premise on which their worldview is based (Nadasdy, 2003: 121).

Finally, Nadasdy claims that the world "knowledge" is another projection of a western world view. The word "knowledge" applies to a field where it is differentiated from "non-knowledge", like in the Western world, where "knowledge" or "science" are kept separate from other spheres of knowledge in society (often in universities). The Kluane people in Southern Yukon, where Nadasdy conducted his fieldwork over three years, perceive their worldview not as knowledge, but more as a "way of life". This "way of life", cannot be separated from a person´s everyday interactions and involvement with the environment in which he or she lives (Nadasdy, 2003: 121).

Further, "knowledge" or "science", in the Western sense of the word is subject to the process of compartmentalisation, or divisions between disciplines and sub disciplines like "biology" and "sociology" or "socio-biology" and "molecular biology" (Nadasdy, 2003: 121). One Tr'ondëk Hwëch'in Elder said the following when taking me on a trip out on the land: "I look for caribou. I look at the river and the snow. I look at the clouds, at the tracks on the ground, at the willows and the small bushes. This is how I look after the land." As this statement describes, this Elder understood his knowledge as rather holistic than compartmentalised.

Scientific knowledge also presupposes a certain kind of method and implies specific scientific artefacts, like numbers, scales and articles. None of these features characterise indigenous thought or knowledge production in the Yukon. The use of "knowledge" as a label for indigenous thought thus obscures the fact that indigenous thinking does not apply an absolute distinction between "knowledge" and "not-knowledge". Such knowledge is not incorporated into the process of compartmentalisation, it does not apply Western scientific methods and finally does not seek out Western scientific artefacts as a desired outcome (Nadasdy, 2003: 121-123).

Despite Nadasdy´s claim that *Traditional Ecological Knowledge* cannot describe indigenous thought in an accurate way, the name is widely applied in both First Nation studies and in the management of natural resources. The term was also commonly used in Dawson. It is telling that many locals in Dawson perceived my own presence as precisely a study of "Salmon TEK". To try and avoid treating Tr'ondëk Hwëch'in expressions in an inaccurate manner, that is, i) as non-modern and "frozen", ii) as non-holistic and iii) as Cartesian Western scientific knowledge, I have chosen to employ the expression "Tr'ondëk Hwëch'in knowledge" to describe the indigenous worldview in Dawson. I believe that the term "Tr'ondëk Hwëch'in knowledge" incorporates both the local and modern aspects of the indigenous way of thinking. When keeping the term "knowledge", my hope is to treat indigenous knowledge equal to any other type of knowledge found in Dawson.

Bureaucratic Knowledge

At the other end of the spectrum, there is the knowledge on which the Canadian state and its fishing regulations are based on, which is western, biological knowledge. Scholars have pointed at how this type of knowledge is viewed by the general public as value-free and objective knowledge that can be universally applied (see for instance Nadasdy (2003), Latour (1979, 1993), Verran (1998)). The knowledge can be transmitted from one geographic area to another; for example, studies on salmon from the United States of America can be applied to salmon in the Yukon. In having been created within the borders of the university system, such knowledge is not viewed as local, but rather grown out of universities all over the world. This section aims to problematise the presupposed objective and universal attributes that are attached to scientific knowledge.

Many scholars have pointed out that all knowledge, including scientific knowledge, is an outcome of the local context where it evolved. (Nadasdy (2003), Latour (1987), Nader, (1996)). According to Nadasdy, such knowledges "derive from and give meaning to the sociocultural contexts in which they are embedded" (Nadasdy , 2003: 133). Scientific knowledge, thus, depends on the context where it is made to "work". Bruno Latour compares scientific knowledge to an airplane that cannot fly by virtue of being an airplane, but depends on many variables such air traffic controllers, airports, flight schools and pilot schedules to really "work" at all. Similarly, scientific knowledge

depends on specific surroundings to work, including scientific journals, computers, measuring instruments and state salaries (Latour, 1987: 250).

Anthropologist Tim Ingold has also claimed that all knowledge is local, because knowledge is always created in a local context (Ingold, 1974). One type of knowledge can never be held up as being less shaped in a local context than any other type of knowledge, and, following this line of thought, could be more objective than other forms of knowledge. Knowledge cannot be objective *per se,* because it is always created by people in a local context. Knowledge is, according to Ingold, always a cultural, local product (Ingold, 1974: 537-538).

Both Woman Studies and Science, Technology and Society Studies have questioned the "objectivity" implied in science, by examining the influences that both the scientist and research methods have on the actual research result. Perhaps one of the most influential scholars in this regard is Donna Haraway. She showed how biological studies on primates reflected gender transformations in general society (Haraway, 1989). When women entered into the academic world in higher numbers from the 1960s onwards, the focus of enquiry, the research process and the research results changed as a result. From a previous focus on the alpha-male primate, for example, questions by the female scientists were raised about the primate´s relationships, emotionality and collaboration. The researchers' backgrounds and perspectives - simply in being women - influenced the outcome, the presumed value-free biological knowledge (Haraway, 1989).

Thus, according to Nadasdy, the "objectivity" attached to scientific knowledge is the result of a political struggle, and what will count as knowledge is first and foremost a political question. He argues that the label "science" is "the *marker* of validity" and thus a powerful label that has legitimising potency. He suggest that the usage of the term "unscientific" demonstrates this internal power struggle over the term "scientific" within scientific communities. If knowledge is labelled "unscientific", its legitimacy is removed, and with it the power inherent in the knowledge (Nadasdy, 2003: 138).

Despite these findings, why is scientific knowledge still perceived by the general public as being objective and universal? The answer may partly lie in Max Weber's writings about the bureaucratisation of scientific knowledge (Weber, 1946). When a certain kind of knowledge forms the basis of a bureaucracy, as is very much the case for natural resource management in the Yukon, the bureaucratisation process helps rationalise and objectify the knowledge. Because everyone can function as a bureaucrat

as long as the bureaucratic rules are employed, bureaucracy removes the subject from the knowledge and it thereby appears objective (Weber, 1946: chapter 8). Anthropologist Gro Ween points out that the formalised language, as well as the numbers and graphs used in bureaucracies of natural resources add to the impression of scientific knowledge as being objective and rational (Ween, 2009: 96).

Non-First Nation Knowledge

Between these two knowledge systems, I found what I will refer to as "Non-First Nation knowledge". This knowledge resembles the knowledge that Laura G. Ogden found among white alligator hunters, *gladesmen,* in the Everglades National Park in Florida. She claims that the rural white occupation in the park was perceived as "uncivilized threats to nature´s purity" (Ogden, 2011: 2). Ogden further argues that the nature/Native metonym is so strong in North America that it makes the native presence accepted and the displacement of rural white hunters possible in the making and conservation of a national park like the Everglades. The stories and popular literature about white hunters focused on the *gladesmen* as outlaws, for example, the famous Ashley Gang that plundered the Everglades in the 1920s (Ogden, 2011: chapter 1 and 2).

Even though this narrative was pronounced and appreciated by the *gladesmen* themselves, it ultimately essentialised and obfuscated the majority of the *gladesmen´*s culture and lifestyle, as most of them were small-scale farmers, alligator hunters and fishers, not criminals. However, the *gladesmen* did not naturally fit into the "wilderness paradigm" inherent in the creation of wilderness that is reflected in the making of a national park in the United States. Their unsettled class position as rural hunters and petty commodity traders contrasted to both the Natives, who were placed naturally in the "wilderness", and the Everglades' identity as a tourist attraction (Ogden, 2011: 2-3).

Non-First Nation knowledge similarly falls outside the framework in which the making and conservation of wilderness takes place in Dawson. The stories about the first Euro-Canadian settlers focus on *survival,* rather than the continued knowledge and usage of natural resources. The Klondike Gold rush is especially important in this narrative. Thousands of men and women struggled with a nature they were not accustomed to or had any knowledge of dealing with, travelling over the famous Chilkoot Pass or down the Yukon River to reach present-day Dawson. The poem "The Spell of the Yukon" by Robert Service is one of many examples:

I wanted the gold, and I sought it;
I scrabbled and mucked like a slave.
Was it famine or scurvy-I fought it;
I hurled my youth into a grave.
I wanted the gold, and I got it-
Came out with a fortune last fall-
Yet somehow life's not what I thought it,
And somehow the gold isn't all.
(Service, 2004: 9)

Today, the same narrative is expressed in a number of different ways, as Dawson City has commodified it and much of the Dawson income depends on the approximately 60 000 tourists that visit Dawson every year to get a glimpse of what they perceive as being a true gold rush city. During the summer, guides swirl around town in 1800-style costumes, the casino offers Cancan dance shows and busses bring tourists to dig for gold at the historic Bonanza Creek, where gold was discovered in 1896.

This narrative not only covers the fact that all prospectors were helped and often rescued from death by indigenous people who obtained extensive knowledge about life in a subarctic climate. Like in the Everglades, these stories both essentialise and romanticise the actual culture and knowledge of the Euro-Canadian people who have spent and are spending their lives in Dawson. Some families have lived in Dawson for generations, and have obtained inherited knowledge from their parents and grandparents about life in the Subarctic, whether it be hunting practices or how to dress warm in 50° below zero temperatures. However, the nature/Native metonym does not extend to include Euro-Canadians. This might be the reason why the Euro-Canadian hunter´s knowledge is overlooked in academic literature from the Yukon and is not spelled out as a category of knowledge that can help broaden scientific understandings or contribute to the management of natural resources. The knowledge of non-First Nation people in Dawson would only be taken into account through participation in advisory committees, employment in the federal department or through personal initiatives to influence the management of natural recources, such as salmon.

To summarise, in Dawson I found the Tr'ondëk Hwëch'in knowledge, which was viewed as local and important to salmon management, the bureaucratic knowledge,

which was seen by the general public as universal and objective, and on which salmon management was largely based, and finally the non-First Nation knowledge, which was local but not viewed as important or spelled out as a specific type of knowledge. Human-salmon relations in Dawson are based on all three categories of knowledge. To explore the differences between these types of knowledge and the very different relationships such knowledges have to salmon and salmon management, it might be useful to ask the question: How does knowledge becomes knowledge? To answer this, I will seek support from how Actor Network Theory perceives the process of becoming - how things comes into being. I then turn to studies of the role that power possesses in the process, before I finally will explore what might happen when different types of knowledges meet.

How Does Knowledge Become Knowledge?

To investigate how knowledge becomes knowledge, it might be useful to turn to Actor Network Theory (ANT) and the differentiation between multinaturalism and multiculturalism. The premises offered to my research by Actor Network Theory are: i) All things come into being through their relationships with other things, and ii) all things that come into being - animate and inanimate - have the ability to influence the world. If we view the world through the lenses of ANT, rather than being multicultural, where different cultures live "side by side", the world is multinatural. The multinatural world is full of potential realities, or natures, enacted through its relationships. This enactment process is what the ANT scholar John Law has referred to as "ontopolitics" (Law, 2007), later referred to as "ontological politics" by Annemarie Mol (Mol, 2003). As John Law states: "The natural, the real, is not a gold standard. It can, at least in principle, be unmade and reconstructed otherwise" (John Law, 2004: 3).

Annemarie Mol exemplifies "ontological politics" in her work on the medical condition, "atherosclerosis," as it is enacted in a Dutch hospital. Her point is that performances of Atherosclerosis can be several things, within the same body, in a consultation, in surgery or on the pathologist's table. A disease such as atherosclerosis come into being through its relationship to something else: the conversation between a patient and doctor, through a physical examination of the patient, through a pathologist´s microscope. These different meetings involve translations of the same phenomenon, for example, the patient's description of pain in the legs understood as poor circulation; the finding of matter on the inside of patient's veins in surgery. There are different actors at

the different stages: The doctor, medical books, the pathologist, the table, the knives, the microscope and the microscope fluids. A disease can change its nature, which happened when the medical journal entered the doctor´s office. Diseases became from that moment on related to history, to the lived life of the patient (Mol, 2003: chapter 2).

John Law explains that not all possible realities make it into the world, and thus things are always in a process of "coming into or going out of being in the process of becoming realer or less real" (Law, 2004: 3). The things that make it into being might only last for a certain time. Such things can become more real or less real, or they can disappear completely. Law suggests imagining "a contested gradient of real-ness" (Law, 2004: 4). These processes of enacting natures, or constructing realities, is what Law calls "natureculturetechnics" (Law, 2004: 4).

What are the implications if we view the world as consisting of a multifractioned web of relationships between human and non-human actors that become real through relations? As John Law further points out, two implications follow. The first is what comes into being, as described above, and the second is how do the things that make it into being relate to each other. The relationships can be "complementary, contradictory and mutually inclusive" (Law, 2004: 6). They can build upon each other, be in total contradiction or coexist without interaction. Law states that the relationships between things are both an empirical and political issue. And in being political, the relationships becomes the subject of a potential hierarchy. This is what Bruno Latour refers to as the "parliament of things", in order to stress that natureculturetechnics are contested (Latour in Law: 2004: 6-7).

It is precisely the *contested* aspect, the struggle over what will make it into being and how what gets made into being relate that is important in my attempt to investigate knowledge production in the Yukon. If we view the different knowledges in Dawson as being an outcome of this struggle of becoming, and further examine the struggle between things and relationships, it is possible to understand the politics on which the different knowledges rest. Like all other things, knowledge is in the constant process of becoming less or more real, or in the constant process of being "produced, legitimated, marginalized, and/or eliminated" (Nadasdy, 2003:11). The political focus allows us to include power in the analysis, which is an inclusion that is vital, according to Nadasdy. When knowledge struggles to become more or less real, power is always present in the

process. It is thus not possible to investigate knowledge without including the role that power has in its production.

Knowledge and Power

Eric Wolf distinguishes between four different types of power (Wolf, 1989). The first is individual power, or an individual´s potency. The second is social power, or the ability one person has to impose his or her will on other people. The third is what Wolf refers to as tactical or organisational power, or the ability to control the settings in which people interact. Finally, the fourth is what Wolf refers to as structural power, which is the ability to define the social field and our understandings of the world (Wolf, 1989: 586-587). Structural power is particularly important in this analysis of the knowledges produced in Dawson, because such power defines the social field in which the knowledges are made and interpreted.

Michel Foucault´s description of discursive power resembles the structural power outlined by Eric Wolf. Foucault´s use of "knowledge/power" as one concept illustrates his argument that knowledge and power are inseparable. He argues that equally important to the ability to use coercive force is the ability to *define*, or the ability to construct the discourse within which a subject can be discussed, and to establish the premises for what are *thinkable* and *unthinkable* behaviours (Foucault, 1980). As I will show in this thesis, there are certain behaviours towards salmon and salmon management that are both thinkable and unthinkable.

Julie Cruikshank insists that a subject that is as complex as indigenous knowledge in Canada should be treated as a distinct intellectual tradition (Cruikshank, 1981, 2005). The same point is made by Arun Agrawal, who argues for the need to go beyond the distinction between TEK and scientific knowledge. Rather than talking about "scientific" or "traditional" knowledge, we should talk about "multiple domains and types of knowledge, with differing logics and epistemologies" (Agrawal, 1995). Agrawals emphasis on differing logics and epistemologies imply that these differences involve fundamentally different ways of perceiving the real world. Mario Blaser (2009) argues that this difference is *ontological* rather then *epistemological,* because, "at stake are not different cultural perspectives on the world but the very assumption that this particular world of one nature and many cultures, rather than a relational world of humans and fully agentive nonhumans, is the ultimate reality" (Blaser, 2009: 17).

As many scholars have pointed out, making a decision or a law on the basis of contradictory worldviews is not what happens in the field (Blaser (2009), Nadasdy (2003), Ween (2012)). Nadasdy has looked at co-management situations in southern Yukon, where genuine attempts were made to include indigenous knowledge in environmental management. Despite the sincere intentions by government representatives and First Nation people, ultimately decisions were made within one ontology. To explain why this happens, it might be useful to examine which structural power shapes the social field where co-management takes place, Bruno Latour's notions on modernity and finally the problem of translation.

When Knowledges Meet: Co-Management

"Co-management" grew out of the land claim negotiation process that has taken place in the Yukon since 1973. The UFA outlines the parameters for how co-management should be carried out in the Yukon. This includes principles for self-government and distribution of power over land and resources. Within their traditional territory, a "signed First Nation"[10] is exempted from the general hunting and fishing regulations. They do not need a licence to fish or hunt, which is mandatory for all other citizens, as long as they fish and hunt for "subsistence" use, meaning harvesting for food, exchange and ceremonial purposes. If they want to sell any part of the fish or animal, they will need a commercial licence.[11]

According to the UFA, each First Nation is secured representation within the management of natural resources through participation in different advisory committees of which First Nation are granted 50 percent of the seats. With regard to salmon, the advisory committee is called the "Yukon Salmon Sub-Committee".[12] The Canadian federal government is the entity that has the ultimate responsibility to manage natural resources, like salmon. The Canadian government also has the monopoly on making laws and using coercive force, as the First Nation self-governments neither include a police force nor the ability to make federal laws.[13]

Paul Nadasdy argues in *Hunters and Bureaucrats* that the idea behind co-management is based on the multicultural-based premise that scientific knowledge and

[10] To be "signed" in this context means that a First Nation has signed a *Final Agreement* with the Canadian Government under the UFA.
[11] UFA, 1993: 155 (16.2.0), 158 (6.4.2)
[12] http://www.pac.dfo-mpo.gc.ca/consultation/yukon/yssc-scsy/index-eng.html, http://www.yssc.ca
[13] UFA, 1993: 90 (10.5.7)

TEK are two distinct intellectual products. Integrating TEK with science will thus be "a simple matter of combining the intellectual products of one system with those of the other" (Nadasdy, 2003: 132). The term "co-management" indicates that management is carried out as a joint venture between two equal parties. Nadasdy argues in his book that co-management in the Yukon is carried out in a context of unequal power relations. He claims that the management of natural resources in Canada is based on a western scientific rationale. By taking part in co-management, First Nations legitimise and manifest this rationale, and thus the power of the state (Nadasdy, 2003: chapter 3).

During the time of Nadasdy´s fieldwork, the Kluane people were negotiating their *Final Agreement* with the Canadian state. Based on this fieldwork, Nadasdy claims that by accepting negotiations with the Canadian state and getting involved in co-management efforts, the Kluane First Nation accepted the premises laid out by the state, and thus accepted a knowledge that contradicted their own worldview. Before colonialisation, there was no such thing as a Kluane First Nation or any distinct borders between First Nations. By accepting negotiations on settlement lands and traditional territory, the Kluane First Nation accepted the existence of borders and ethnic differences. They also accepted the premise of ownership to the land, although in their pre-contact knowledge, land was not viewed as something that could be owned. Their involvement in land negotiations caused the Kluane people speak about animals in numbers, which was also uncharacteristic of their worldview, in which animals are looked upon as sentient individuals. By accepting the premises made by the Canadian state, the Kluane people accepted things that are *thinkable,* in Foucault's words. Not only do First Nations *accept* an uncharacteristic way of thinking, over time, especially when establishing self-governing bureaucracies that resemble the Canadian state (and that *must* resemble the Canadian state according to the UFA), they also *adopt* the new concepts and ways of thinking (Nadasdy, 2003: chapter 1 and 4).

Nadasdy argues that co-management must be carried out within Foucault´s *thinkable* knowledge. When *unthinkable* knowledges are heard, as was the case when Kluane Elders offered testimonies to the committee, this had to be interpreted within the bureaucratic knowledge. The very purpose of collecting indigenous knowledge was to "broaden" the existing body of knowledge, that is, the knowledge of the state. This clearly demonstrates the structural power that the Canadian state has to shape the field in which co-management takes place. Instead of being treated as a distinct intellectual

system of knowledge, indigenous knowledge is viewed as a new set of data that can be translated to accommodate Western science. The reverse is never true. Why is this the case?

In his book *We have never been modern* (1993), Bruno Latour claims that a division does not exist between culture and nature, only *the insistence* on the differentiation between nature and culture, science and society. The view of the modern world is based on this insistence, which is a view that Latour refers to as "The modern constitution". The modern constitution allows "the modern people" to think of everyone who does not differentiate between culture and nature as not modern. In this way, "modernity" takes a stand towards the multiculturalist view (Latour, 1993: chapter 2).

A multinaturalist perspective offers an immediate threat to "The Modern Constitution". Latour claims that it is impossible in a "Western" or "modern" perspective to view every understanding of the world as equally rational, or equally "true" as scientific understanding. As Mario Blaser points out in his empirical account on the Yrmo indigenous community in Northern Paraguay, the knowledge of the "other" is reduced to being superstitious, or based on error. The multiculturalist stance will only have room for other cultural views as long as such views do not challenge the Western scientific rationale. (Blaser, 2009: 17).

Annemarie Mol's (2003) account of "coordination" and "distribution" might be helpful in this regard. The former claims that different knowledges, or cultural views, should be taken into account, and more perspectives make for a better foundation for decision making. Different views can actually be combined and make a reasonable, common decision. The latter simply keeps different knowledge practices apart, to avoid any disturbance in the decision-making processes (Mol, 2003: chapter 3 and 4).

The Problem of Translation

Nadasdy´s analysis focuses on discursive or structural power. Other studies on co-management show similar problems in incorporating indigenous knowledge, by focusing on the problem of translating. Gro Ween and Jan Åge Riseth explored what occurred after an attempt to incorporate Sami knowledge into the establishment of a national park in Northern Norway failed (Ween, Riseth, 2011). They differentiate, following Tim Ingold and Kurttila (2000), between *Local Traditional Knowledge* (LTK) and *Modern Traditional knowledge* (MTK). To be able to fit into a process such as the establishment of a UNESCO

national park, LTK must be translated into MTK, "an abstract, collective category of non-western knowledge" (Ween, Riseth, 2011: 231).

The authors argue that the indigenous knowledge will change in such processes and that LTK cannot be translated into MTK, or anything close to it. Again, following Ingold, the premises for LTK are the inseparable elements of subjectivity and locality, whereas MTK displaces the subject, or knower. When the circumstances and relations of a particular knowledge change, when it goes from being subjective and local and put into written words and park planning prospecti, the nature of such knowledge will change as a result. Because LTK could not be translated to MTK in principle, the attempt to include indigenous knowledge in co-management has a very limited possibility of succeeding (Ween, Riseth, 2011: 231, 239-240).

This chapter has explored the different knowledges I discovered during my fieldwork in Dawson. I have further investigated how knowledge becomes knowledge, the ontological politics, and the role that structural power possess in the process for knowledge to "become more or less real". This is the foundation on which I will investigate knowledge about salmon and salmon management, and the meetings and non-meetings of the knowledges in the following chapters.

Chapter Outline

First, in chapter two I will describe the methodological choices through which I approached my research questions. Chapter three provides a historical background that, following Nadasdy, is necessary in the analysis of knowledge (Nadasdy, 2003: 11). I continue in chapter four to investigate the importance of Chinook salmon by exploring the relationship between humans, salmon and dogs.

In chapter five, I describe the different types of knowledges about salmon that I discovered during my stay in Dawson, that is, the Tr'ondëk Hwëch'in knowledge, the Bureaucratic knowledge and the non-First Nation knowledge. I do this by asking the question "What is a salmon?". Chapter six explores the different views on how salmon should be managed, addressing questions regarding why the Chinook salmon has been in decline and what should be done to rebuild the Chinook salmon stock. Next, I describe in chapter seven the management of salmon as it happened at a site in Dawson before and during the Chinook salmon run. Finally, I will present some concluding remarks in chapter eight.

Chapter Two: The Research

Salmon fishing in Dawson is by nature controversial. Due to the extensive decline of Chinook salmon during the past 20 years, the Chinook fishery has tight legal restrictions. Chinook salmon is also of great cultural importance in Dawson, to First Nation and non-First Nation people alike, as will be explored in chapter four. It was a beloved topic of conversations to all people in Dawson. Salmon was not only important during the short fishing season in late July and August, it was also a part of life in Dawson year-round, for instance as a central topic of conversations, as a food source and as an actor in stories.

This chapter describes the methods I chose to collect different knowledges about salmon. I start by providing the theoretical framework I employed, which has implications for how I collected these knowledges. Then I introduce "Arctic Domus: Human-animal relations in the North", the ERC research project I was associated with as a Master´s student. I continue to describe how I learnt about the different collected knowledges, mainly by using participant observation and interviewing. The potential language barriers are briefly described, before I go on to explore my own role in the field, or the way the knowledge I collected was "situated ", to borrow from Donna Haraway (Haraway, 1998). Finally I discuss the ethical implications of my work.

Theoretical Framework

According to Paul Nadasdy, investigating how knowledge is produced must be done empirically (Nadasdy, 2003: 11). Actor-Network Theory (ANT) might be helpful in this regard, because ANT states that things come into being, or become *enacted* through meetings with other entities. Things exist through their web of network, in the many meetings where nature gets enacted. ANT not only views human beings as actors, but includes the world, its materials, its plants, its regulations and its fish as actors (Lien, (2012) Remme (2013)).

Such an approach was applied by Michel Callon in his famous study from St. Brieuc Bay, involving fishermen, scientists and scallops. Callon investigated an early unsuccessful scientific attempt to cultivate scallops. In the analyses, Callon makes use of a symmetrical approach. He includes the scallops as actors and treats the relationships

between both scallops and fishermen and scallops and scientists as being as important as the relationship between other entities in the study (Callon, 1986).

In this thesis, I, similarly seek to treat all relationships as being symmetrical. In Dawson, Chinook salmon get enacted through many different things including the biological category that is employed by the DFO, the Tr'ondëk Hwëch'in knowledge about salmon, the regulations that manage salmon, the technical devises that count salmon, like sonar stations, and the practice of fishing salmon in the river. A symmetrical approach will include the salmon as an actor, along with the regulations, boats, nets, other animals, people and many more constituents. I will treat all of the types of knowledges that I found in Dawson as symmetrical. I believe that ANT and a focus on materiality can be helpful when examining a controversial subject like the Yukon River salmon. From switching the focus from meaning to practice, I am able to investigate not only what a salmon is, but what it *does.*

Arctic Domus

In August 2012, one of my lecturers at the University of Oslo, Gro Birgit Ween, invited Master's students to participate in the research project "Arctic Domestication: Emplacing Human-Animal Relationships in the Circumpolar North". The project was based at the University of Aberdeen, Scotland, under the direction of Professor David George Anderson. Twenty scholars would conduct fieldwork in the Arctic regions of Canada, Norway and Russia, exploring domestication through new perspectives outside of traditional definitions, which involved notions such as domination, control and competition.[14] In exploring Arctic human-animal relationships with dogs/wolves, reindeer and salmon, the scholars wanted to investigate the complex socio-ecological relationships between these animals and the humans with whom they interact.[15] My background in taking First Nations Studies at the University of British Columbia in Vancouver led me to think this would be an interesting theme for my thesis.

As a part of the ERC research project "Arctic Domus", I was able to receive a formal invitation to conduct research from the Tr'ondëk Hwëch'in government. With this invitation, I qualified for a research permit from the Yukon Government. It would have been very difficult to get invited into a First Nation community in the Yukon without the support from "Arctic Domus". Peter Loovers and Robert Wishart, both from the Arctic

[14] See for instance Juliet Clutton-Brock (1989).
[15] Anderson, 2011: ERC Advanced Grant 2011 Research proposal

Domus group, had already conducted fieldwork in the region and had longstanding relationships with First Nations there.

The formal invitation was not the only advantage I got from participating in the "Arctic Domus" project. Not only did I get a full list of regional literature at an initial meeting in Aberdeen, but throughout the fieldwork, the project participants would include me in their theoretical discussions, send me useful articles and create a questionnaire that I could use for the interviews. In turn, I would send them a monthly field report to keep them updated on my work.

When I arrived in Dawson City, Peter Loovers was there to meet me. The first day, he gave me several insightful tips about conducting fieldwork in a Northern community. These included what I should omit, how conversations were initiated, how I should shake people´s hands and what I should and should not do in general. He introduced me to the key Tr´ondëk Hwëch´in Elders and arranged the first meeting between the Tr´ondëk Hwëch´in Government and me. I was able to both present my project and establish contact with them. Peter and I spent a couple of days going to potlatches and other community events before he left for another trip in the field to Fort McPherson.

Collecting Tr'ondëk Hwëch'in Knowledge

The initial meetings with Peter Loovers and Tr'ondëk Hwëch'in were a good way to start the fieldwork. I had been accepted as a legitimate fieldworker in Dawson from day one. The Tr'ondëk Hwëch'in included me in their activities; they invited me to their potlatches, meetings, meals, trips on the land and to their camps. They gave me a page in their monthly newsletter to present myself and my project to the entire community. I was invited to the Elders Council to present my project and also got their important approval of my project. In this way, I gradually got to know people within the Tr'ondëk Hwëch'in community.

Throughout my seven months in Dawson, within the Tr'ondëk Hwëch'in administration, I would work most closely to the Heritage Department and the Fish and Wildlife Department. The Heritage Department organised the cultural camps, like the First Fish at Moosehide, Spring Camp at Cache Creek and Hide tanning Camp at Land of Plenty. Participation in these camps provided me with insights into the Tr'ondëk Hwëch'in knowledge and how this knowledge was applied today. Camps were also a great place to talk and get to know people in the midst of cooking, eating, praying,

Hunting at Spring Camp

playing, fishing and hunting. The Heritage Department also organised a number of meetings, potlatches and celebrations in Dawson, like the celebration of Aboriginal Day, practises with the Hän singers and the First Fish Community meal, where the first salmon fished were shared with the Dawson community. I was welcomed into all of these activities, sometimes as a participant, sometimes as an audience member and yet at other times as a worker. The Heritage Department also let me use their library, which is probably the most extensive library containing the Tr'ondëk Hwëch'in literature in the world.

The Fish and Wildlife Department was in charge of the management of fish and wildlife, and thus the First Nation salmon fishery in Dawson. To ensure enough salmon for ceremonial purposes amidst the fish crisis, the department fished one hundred Chinook salmon for the community. These fish were used for community potlatches, lunches, celebrations and as meals for Elders. Those who fished for salmon would report their catch to the Fish and Wildlife Department, and they in turn would offer advice about resource harvesting and communicate fish and wildlife policy to the Tr'ondëk Hwëch'in citizens. They would participate in public meetings on resource harvesting and

salmon management, such as the meeting in the Yukon Salmon Sub-Committee that took place in May. They were in communication with the federal DFO. I had the opportunity to go fishing for the community with the Department of Fish and Wildlife, and participate in meetings and discussions.

Another great resource to me was the Tr'ondëk Hwëch'in Cultural Centre, the "Long time ago house" (Dänojà Zho). It held a permanent exhibition about the First Nation history, and a cinema that showed an interpretive film about The Tr'ondëk Hwëch'in way of life. A shop sold First Nation handcrafts, like beaded slippers, hairclips and key chains, (mostly) created by the Tr'ondëk Hwëch'in women. In addition to the permanent exhibition, several temporary exhibitions took place throughout my stay that would either tell the story of the Tr'ondëk Hwëch'in or discuss matters like natural resource management. Finally, several meetings and potlatches took place at the Cultural Centre.

Participation in activities run by the Tr'ondëk Hwëch'in government provided me with an opportunity to get to know the Tr'ondëk Hwëch'in people and for them to get to know me. I met Tr'ondëk Hwëch'in people of all ages, both young people and Elders alike. In this way, I made friends who invited me into the private sphere, and I discovered who might have insights on salmon that they would be willing to share in a subsequent formal interview. During the summer, I was invited to participate in the subsistence fishery.

Elder Angie Joseph-Rear teach me how to make rabbit snares.

Collecting Non-First Nation Knowledge

My formalised role in the Tr'ondëk Hwëch'in community also proved helpful in my initial approach to non-First Nation people in Dawson. They accepted my role as a "Tr'ondëk Hwëch'in anthropologist" and willingly shared their views and information with me. Many people had figured out why I was in Dawson, as the nicknames "Fish

woman" or "Salmon lady" would suggest. I did not always have to introduce myself. Because they knew I was studying salmon, they would often begin the conversation by stating what they thought about salmon, how they thought salmon should be managed or recount a story about salmon from their childhood.

However, I did not enjoy the same status among the non-First Nation population that I did when I attended Tr'ondëk Hwëch'in activities. To get me involved in the Dawson community, the Tr'ondëk Hwëch'in sent out an email presenting me as potential volunteer help. It was a great help, because every week there are events in Dawson that need volunteers. These include dog mushing competitions, the fur show, the short film festival, the music festival, the celebration of cancer survivors, the exhibition in the art gallery and many more. Even though these events never involved in the salmon fishery, they provided insights into how many people in Dawson live and think. In addition, they were also a good way to simply get to know people.

After about a month, there was one group that especially captured my attention. These were the non-First Nation retired fishermen who had fished commercially for Chinook salmon in the 1980s and 90s. They would live along the river where there was a good eddy during the salmon run. More than just a job, fishing was a way of life for these fishermen. After the decline in salmon, these people had secured day jobs or found other ways to provide for themselves. Still, their knowledge about salmon in the past was extensive and they still had opinions on salmon and what should be done about the decline. The fishermen would occasionally still fish. Their only opportunity was to fish for Chum salmon if they wanted to fish for salmon. I was intrigued by the fact that despite their extensive knowledge, they were not included in the formal management of salmon. I got to know and interview six of these fishermen. When the Chum salmon run came in late August, I went fishing with one of the fishermen – the only one who fished Chum salmon with the intention of selling it.

Collecting Bureaucratic Knowledge

To gain access to bureaucratic knowledge, I approached people who had been engaged in salmon management at all levels. I spoke to people working for the DFO, police officers, park officers, the Yukon Salmon Sub-Committee members, one employee at the Eagle sonar station and Canadian rangers. At "First Fish", employees from the DFO were invited by the Tr'ondëk Hwëch'in Heritage Department to give educational speeches on

salmon, fish health and bear safety. Representatives from the Yukon Education Department were present at both "Spring Camp" and "First Fish". They were there to observe whether attendance at the camps might qualify for getting school credits, and thus become a part of the formal education system in the Yukon. Governmental representatives were often present at the meetings where the management of natural resources were discussed. On other occasions, I simply met DFO employees when they were out on the Yukon River to supervise the salmon fishery.

Method: Participant Observation

When I first arrived in Dawson in February, temperatures were around -30 degrees, the city was covered in snow and the ice lay thick over the Yukon River. Not a single fish net or boat was in sight. Only a few people could be spotted in the streets. It seemed like everyone stayed inside their heated homes. I would stand outside my house at night and watch the Northern lights dancing in the sky and wonder why on earth I had chosen to come in February? I would soon learn that salmon did not have to be physically present to be present. Various manifestations of salmon were all around me: in conversations, photos, stories, public meetings and songs. Being present when the salmon song was performed or attending the Elder´s meeting about salmon, global warming and changes at "Spring Camp" in March proved to be just as important to my fieldwork as taking part in the actual fishing. Everywhere I conducted participant observation I would meet salmon in one form or another.

When the salmon arrived in late July, I would participate in the salmon fishing in different ways. I stayed one week at the "First Fish" camp along with 21 children and youth. I fished along with the Tr´ondëk Hwëch´in in the Natural Resources Department and with civilians when they fished for both Chinook and Chum salmon. After catching the fish, I would learn how to clean, cut and process the salmon. I also enjoyed eating salmon, whether it be cooked, dried or smoked. I stayed focused on both *practice* and *materialities,* particularly on how salmon was enacted by whom, how and where, on what was done in the actual meeting and the circumstances in which the meeting took place.

While carrying out participant observation, I would often engage in semi-structured interviewing. People would expect me to have questions, and they consented to me asking about salmon after a meeting or at a potlatch. I would not use a notebook

while doing semi-structured interviews, but would write down the conversations in my field notes later the same day. Still, quite often people would tell me to write something down that they thought was especially important, as if they wanted to ensure I would remember it, for instance who I should talk to, which meetings I should attend and were the next celebration was. The semi-structured interviews often led me to other people or events. It was a good way to get to know people and figure out the next step in the research.

Method: Structured Interviews

The months conducting participant observation and semi-structured interviewing had provided me with certain hints on who I should conduct in-depth interviews with and what we should talk about. In June, I started interviewing people. The Tr'ondëk Hwëch'in Heritage Department provided me with a list of the names and phone numbers of people they thought could contribute to my project. This list proved to be of great value. I managed to get in touch with people who hardly left the bush to come into town, retired fishermen who would spend most of their time at home and other people I most likely would have never met. I also seized the opportunity to get into deeper conversations with the people I had already gotten to know.

The interviews would last between one and four hours, and I conducted 17 interviews altogether. Sometimes I used a recorder, but most often I only took notes. On some occasions, the recorder seemed like a constraint on the dialogue. On other occasions, especially when I interviewed the Tr'ondëk Hwëch'in Elders, I was expected to record the interview. What the Elders shared was regarded as part of the Tr'ondëk Hwëch'in body of knowledge. It belonged to them as a community and was important to preserve for future generations. For this reason, it was expected that I would transcribe the interviews and give both the transcriptions and the recordings to the Tr'ondëk Hwëch'in Heritage Department.

I would always start the interview using the questions provided by the Arctic Domus postdoctoral fellows working in other Arctic and Subarctic parts of North America. These questions were very valuable. I gave priority to the questions about salmon and dogs, which were the animals present and hence most relevant to my research.

After going through the questionnaire, I would add my own questions.

Marianne Lien writes in her text "Latter og troverdighet. Om antropologi i hjemlige egne" (2001) about how, when conducting fieldwork in one's own country, it was helpful to ask "stupid" questions. For example, when asking a farmer "What is a carrot?" she got the most interesting answers (Lien, 2001). Inspired by this technique, I would always ask my participants the following two questions: "What is a salmon?" and "What is the Yukon River?". Just as Marianne Lien experienced, these "stupid" question would often lead to interesting answers. "Salmon is frustration" one participant answered, as cited in the beginning of chapter one. She was of Euro-Canadian origin and could not participate in the Chinook salmon fishery. "The land is my body and the river is my veins", another man stated when describing the Yukon River.

Contrary to the experiences of significant anthropologists in this particular region (see for instance Nadasdy, 2003), I found interviewing rewarding. The assurance of anonymity felt liberating to some people, who then took the opportunity to speak freely. The interviews also provided an opportunity to talk in private, in contrast to when I spoke to people in public, where we were being observed and could be interrupted at any moment. Controversy attached to salmon fishing might be the reason that people spoke more openly in private. Salmon fishing has legal ramifications, and if someone were to admit they had fished illegally, it would have been better to do so without anyone else hearing it.

It was never difficult to get people to participate in an interview. The Tr'ondëk Hwëch'in were used to researchers who showed an interest in TEK. I was far from the first anthropologist or scientist who had visited their community. It seemed important to the Tr'ondëk Hwëch'in to share their knowledge with researchers and future generations. One example that illustrates this was the occasion when I arrived at an interview and learned that the interviewee´s sister had just passed away. I immediately assumed that the interview was cancelled. Yet to the interviewee, the knowledge that he had to impart was so important for him to share that he wanted to continue. The non-First Nation people I interviewed often seemed flattered that I was interested in their knowledge, perhaps because many researchers would most often focus on the First Nation people.

Language

There are three main languages used in Dawson: English, French and the Hän language.

English is the spoken language for most people, and it is most commonly used in everyday conversation. It was the most important language for me to speak during my stay. Even though I might consider my English to be decent, there were always slang and cultural references that I would have a hard time understanding. There is a little Quebecois community in Dawson, where the spoken language is French. Canada is officially bilingual, and all official text must be written in both French and English. French is my third spoken language, however, I only spoke French once during my stay in Dawson. The Hän language is equally little used in everyday conversations. Still, the language is experiencing an ongoing revitalisation in Dawson and is of increasing importance in the community. Children are taught the language in school, the Hän songs are all sung in Hän, and people are trying to learn and speak it. "Hello" is often replaced by "Drin Hozo!" and "thank you" is most often expressed with "Mäshi Cho". People would also often introduce themselves in Hän before they continued in English. I managed to learn and use the most basic Hän words.

Situated Knowledge

In chapter one, I claimed to treat all knowledges as local and subjective, based on the premise that no knowledge can be objective *per se*. Following this logic, it is necessary to turn the spotlight toward myself. In 1988, Donna Haraway wrote the article "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". In this article, Haraway attacks the myth of scientific objectivity, the passive male, all-knowing observer with no body of his own. To avoid the "God trick", she suggests a science that takes into account the embodied, active and complex scientist, since “all eyes, including our own organic ones, are active perceptual systems, building on translations and specific *ways* of seeing, that is, ways of life” (Haraway, 1988: 583). In anthropology, we use our bodies as the premier science instrument, bodies that are never neutral. This section intends to give an account of how my data collection is situated.

When an anthropologist puts his or her body in the research, the bodily attendance affects the field the anthropologist is there to study. Especially during my initial days in February, I stood out as a foreigner everywhere I went. For instance, on one of my first days in Dawson I spoke with one landlord I had never met or heard of before, to arrange housing . After introducing myself, he said, "Oh, I know who you are. I

saw you earlier on the street. With a guy and a small child?" Dawson is a small city, and more so during the winter. I often got the feeling I was being observed as much as I was doing the observing.

As a Master´s student from the University of Oslo, I represented university knowledge. It was sometimes a challenge being transparent about my purpose, while simultaneously not alienating the participants in my project. I tried to speak about my studies in comprehensible terms, without using any anthropological jargon, or "marmalade language" as one of the Tr´ondëk Hwëch´in Elders put it. I quickly learned this after opening the very first interview stating that I was interested in the emic perspective, not merely the etic one. "-Which means...?," the interviewee replied. It was not a good start.

Bringing my husband and our one-year-old daughter on fieldwork affected the way I experienced the field in different ways. As a mother, I would sometimes naturally be forced to abruptly halt my role as an anthropologist and switch to the mother role. My daughter came along to many potlatches and celebrations, and a natural part of looking after a one-year-old is to clean up food spillage from the floor and stop her from running into traffic. I believe my daughter had a humanising effect on the participant-observation process. I was not only a data collector, but also a person with family relationships and responsibility for a busy child.

My daughter Ulla and "grandpa" Victor Henry

Being a mother connected me to other mothers and grandmothers in a way that might reflect Unni Wikan´s concept of "resonance". Wikan describes how it is possible to connect to people even when you do not speak the same language, and that there is a resonance that connects humans across cultures and language barriers (Wikan, 2012). In May, my mother was visiting from Norway and we took my daughter to a potlatch at the Tr´ondëk Hwëch´in Cultural Centre. All of

a sudden, I realised that my daughter had a whole cube of sugar in her mouth. I turned to my mother and shouted in Norwegian: "What are you doing, mom? Are you crazy? You can't give her pure sugar! She is one year old!" The women in the room smiled at me. Even though they did not speak Norwegian, they knew exactly what had happened. "There is not a single mother in the world who hasn't experienced what you just did", they smiled.

Finally, a one-year-old girl would not distinguish between strangers, and stumbled without prejudice into anyone's arms. She simply walked over to people who I had not intended to talk to, and the act of retrieving her afforded me the opportunity to talk to strangers. She was a natural icebreaker and topic of conversation. In this regard, my daughter can be viewed as a tool to get to know people, engage in conversations and connect me to people.

Bringing my husband to Dawson also had implications for the research. He began his stay in Canada on paternity leave and spent his days at open day-cares with other parents and children. In May, he performed simple jobs and did some volunteer work. He was not restricted by the same rules and norms imposed upon the scientist. His observations and perspectives have been of great value to my fieldwork.

Many studies have focused on fishing and masculinity and fishing and eroticism (Døving (1997), Treimo (2007), Ween (in progress)). In Dawson, fishing was carried out by both males and females. Because they fished with nets, there were no "playing" with the salmon or "landing" it. In fact, this behaviour was perceived as immoral to many of the participants in my research. At the same time, bringing your husband on fieldwork restricts the basis for potential misunderstandings connected to being a women in the field. In this sense, bringing my family on fieldwork was of great advantage.

In taking my daughter and husband to Dawson, my daily life would bring me into a familial sphere and family-related activities. I experienced parenting in Dawson through my daughter's attendance at "The Little Blue Day-care". I met with other mothers and fathers at the playground or at the swimming pool, and had to relate to with the Canadian children´s health program. As a family living in a rented house at the eastern end of Dawson, we connected with people on our street in being their neighbours, conversing over the hedge or on the street corner. We would sometimes attend a barbeque or a party next door, and similar to the experiences of Cato Wadel in Newfoundland, as their neighbour, I could follow their daily rhythm and habits just by

living in the house I was living in (Wadel, 1991). This was true also when we lived in a cabin at Moosehide at the end of our stay.

In Dawson, people of both First Nation and non-First Nation origin refer to themselves as "Northerners". They perceive themselves as being distinct from "Southerners" and especially city people. Big cities are spoken about as being stressful and unpleasant. In coming from Norway, I could relate to the concept of being Northern. Despite being on the other side of the globe, the landscape, climate and fauna in Dawson resemble those of Norway. I am used to dressing warm, I know how to manoeuvre in deep snow and I am used to eating both salmon and moose meat. Long, cold winters are not unfamiliar to me, nor are long summer days. I believe my Norwegian background helped me to relate to the lifestyle of the North.

Ethical Implications

Every scientist runs the risk of becoming biased. When anthropologist Aud Talle went back to one of her earlier research sites in Kenya, she would listen to the inhabitants life stories as a method of learning something about the society in which they had lived (Talle, 2002). Similarly, many people in Dawson wanted to tell me how their lives had evolved. These accounts proved valuable. At the same time, these stories were often intense. It was hard not to become emotionally affected when listening to stories about residential schools, or hunting traditions that had been prohibited by the law, racism or reverse racism.

On other occasions, my role as a scientist got confused with that of a biologist. Some people would assume I worked for the Canadian government, and that my "observations" were actions in order to exert control. I assured the participants that I was not looking into the legality of their actions, and that I was focused on people´s perceptions rather than issues of legality. Being a researcher in a field with such tight legal restrictions would necessarily sometimes cause suspicions.

The Tr'ondëk Hwëch'in stressed from the very beginning of my stay that the knowledge they shared with me belonged to them. To ensure the knowledge passed on in this thesis is accurate, the text was reviewed by the Tr'ondëk Hwëch'in after it was finished. All recordings and notes from the interviews were sent to Dawson, to become a part of the Tr'ondëk Hwëch'in body of knowledge. I had no problems with this arrangement until I returned to Norway to write. My lecturers at the University of Oslo

strongly protested any participant´s right to change what the anthropologist writes. During a discussion at one of the literature seminars that is a part of the master´s programme, I was the lone wolf in arguing for the advantages of participant review. However, I believe a review from the participants in Dawson (both First Nation and non-First Nation people) can make sure I interpreted my experiences correctly.

In addition, the Tr'ondëk Hwëch'in wanted their full names to appear in this thesis. In anthropology, the most common practice is one of anonymisation, a practice encouraged by my lecturers in Oslo. Because Dawson is a small city where most people are familiar with each other, and because of the controversy attached to salmon fishing in Dawson, I have chosen to anonymise most of the participants in my project, except when I have cited people from other publications, when I site people from public speeches and when I site Tr'ondëk Hwëch'in Elders from my interviews with them. As discussed in chapter one, I believe that it is important to maintain the link between the Elder´s knowledge and the subjectivity of that knowledge. With regard to the anonymisation of place, it would have been pointless to anonymise the city of Dawson and include the Klondike Gold Rush, which I believe has had a great impact on the lives of Dawsoners. Therefore, Dawson appears with its real name.

In general, I felt that people accepted my urge to ask questions and my role as a fieldworker in Dawson. However, I was not always able to attend every activity I wanted. One example was the Tr´ondëk Hwëch´in General Assembly, where the summer's salmon management was discussed, among other things. This weekend-long meeting was for Tr´ondëk Hwëch´in members only. Another example was the Elder's Council Meetings, to which I was only invited to once. My mention of these non-fields does not mean that I felt I had the right to attend such meetings. I fully understand that certain matters must be discussed without an anthropology student in the corner.

Conclusion

When I arrived in Dawson in February, the snow lay thick in the streets, it was minus 30 degrees out and the Yukon River was covered with metre-thick ice. However, I soon learned that it was possible to investigate salmon even on the coldest winter day. Salmon had been important to the people of Dawson for millennia and still was. Salmon lived on through numerous manifestations including food and stories, and in pictures and education. Being a part of the research project "Arctic Domus" provided me with an easy

entrance into the field. I was able to build up contacts from the very beginning. Through participating in cultural camps, meetings and celebrations, I got to know people, including governmental employees, Tr'ondëk Hwëch'in people and other citizens of Dawson. These contacts afforded me the opportunity to participate in the salmon fishery during the summer.

Conducting research in a First Nation community had ethical implications. My university at home disagreed on some of the research methods that were viewed as being appropriate in Dawson. I had to get involved in a discussion about ownership and local knowledge, which was familiar within the Canadian context, but more foreign at my university in Norway. My role in representing a university in Dawson was sometimes problematic and would from occasionally cause confusion.

The ANT methodological approach for studying how salmon is *enacted,* focuses on the encounters between salmon and other entities and the circumstances in which such meetings take place. This chapter has described the methods I chose to empirically explore these meetings and circumstances. However, meetings in the present are shaped by those of the past. The next chapter aims to investigate the historical context on which the present meetings are based.

Chapter Three: From Harvest to Heritage

According to Paul Nadasdy, the way in which knowledge is "produced, legitimated, marginalized and/or eliminated ultimately depends on historical factors (...)" (Nadasdy, 2003, 11). The different knowledges about where salmon fishing and management are based have been produced in historical meetings throughout the past 150 years between the indigenous population in Dawson, the increasing non-indigenous immigration and the growing governmental presence. To be able to understand salmon fishing and the management of salmon in 2013, it is necessary to explore the historical circumstances in which such knowledges have evolved. This chapter explores the history of Dawson from the pre-contact period until today, including the arrival of miners and missionaries, the fur trade, governmental interest, gold finds, land claim negotiations, fishing practices and restrictions, decline of the Chinook salmon, cultural challenges between the First Nation and non-First Nation populations and later cultural revitalization for both groups.

The Klondike Gold Rush drew in several ethnographers, adventurers and historians, who left behind a broad body of literature about the city. Among the most important contributions from the early 20th century are from William Ogilvie and Cornelius Osgood. Catharine McClellan conducted extensive fieldwork among the indigenous population in the Southern Yukon during the 1970s. Her book, *Part of the Land, Part of the Water* (1987) offers an extended account on indigenous life in the 1970s, and also explores the past through oral stories. I also use McClellan´s student Robert Jarvenpa´s ethnography about Dawson as a source in this chapter.

In 1995, historian Helene Dobrowolsky began to investigate the heritage value of "Tröchek", the historical fish camp located just south of present-day Dawson. That year, Tröchek was under threat from placer mining. The project, which was originally initiated by the Yukon Historical & Museum Association, resulted in the book *Hammerstones. A History of the Tr'ondëk Hwëch'in*, along with several booklets. This book is the most comprehensive account on the Tr'ondëk Hwëch'in people specifically. In addition to the sources mentioned above, I have used the historical accounts as they were told by Dawson citizens themselves during my fieldwork.

The Pre-Contact Period: A Life on the Land

Archaeologists suggest that the first people arrived in Yukon somewhere between 11-15,000 years ago (Dobrowolsky, 2001). According to Catherine McClellan, from this period and until the first Europeans arrived in Dawson around the 18th century, the Tr'ondëk Hwëch'in people lived on the land and off the land. Hunting, snaring, fishing and harvesting provided them with food, tools, clothes and shelter. Their nomadic lifestyle allowed them to travel to places where the food was located, including abundant fields of berries, the Klondike Valley for moose or creeks and rivers for salmon fishing. Everywhere they went, they would be able to make do with materials from the environment. They used spruce trees to build shelters, birch bark to make food containers and wood to build meat drying racks. (McClellan, 1987: chapter 7, Dobrowolsky, 2003: chapter 1).

Helen Dobrowolsky describes the fish and meat they harvested that were preserved in a number of ways to provide them with food year around: much of it was frozen, dried, fermented or smoked. All parts of the fish and animals were used, including intestines, antlers and bones. The hides were sewn into clothes that would keep them warm in temperatures that could reach -50 degrees during the wintertime. They had an advanced system of exchange combined with gifting with neighbouring indigenous communities in every direction. These meetings often culminated in large potlatches where extended gifting took place.[16] Through bartering with other communities, goods from the outside world, like beads and guns, entered their societies (Dobrowolsky, 2003: 4-7).

An early fish camp. Photo by Tr'ondëk Hwëch'in

The Tr'ondëk Hwëch'in people used all kinds of locally availably meat, fish, berries and plants for food, according to Helen Dobrowolsky (2003). Yet of special importance was the salmon run that arrived every July and August. Every summer, the

[16] See Mauss (1954).

Tr'ondëk Hwëch'in people would set up their fish camp at Tröchek to catch the Chinook and Chum salmon as they swam by on their way to the spawning grounds. They would spend months preparing for the short, but abundant salmon run, in order to ensure the fish traps, dip nets and fish camp were ready for the salmon. Salmon was a highly desirable delicacy and added important sources of vitamins and nutrition to their meat diet (Dobrowolsky, 2003: 8-10).

Interest from the Outside

In an 1822 map over North America, which was published by *New Universal Atlas of the World,* the entire Yukon region is a white, blank spot. (McClellan, 1989: 89). It was not until the mid-to-late 19th century that the first fur traders arrived in the region. They soon became incorporated into the well-developed trading system that already existed. During the 1880s, an increasing number of miners started to enter the area to look for gold. A major gold find at Fortymile River, 77 kilometers from Dawson, attracted hundreds of miners in 1887. The first permanent missionary, Bishop William Bompas, came together with his wife in 1892 from the Church Missionary Society, to preach the gospel and educate both Indians and miners. All of these events brought changes to the Tr'ondëk Hwëch'in, however, they were not on the same scale as the one that was about to follow (Dobrowolsky, 2003: 12-16).

The Klondike Gold Rush

In the summer of 1896, around 70 people gathered to fish for Chinook salmon at "Tr´ochëk". It was like any other summer, but the last of its kind. Just up the hill, four people discovered the largest fields of gold ever found in human history, which instigated the world-famous Klondike Gold Rush[17]. Thousands of prospectors moved into the area, including as many as 30,000 in 1898. They needed food and shelter, and soon the largest town in all of western Canada was born. Within a few years, the newly-named Dawson City grew to include banks, breweries, brothels and bars. The gold generated governmental interest and Canada would soon map the Yukon Territory and claim it as Canadian (Dobrowolsky, 2003: 19, 31).

[17] Their names were Skookum Jim, Dawson Charlie, Kate Carmack and George Carmack (Ogilvie, 1913: 125).

Dawson city in 1898. Photo by Parks Canada.

Dawson was built at a high speed. Roads and sewers were in poor condition, and, in 1899, governmental officers feared that an epidemic would hit if nothing was done. Still, even after experiencing such teething problems, Dawson soon became a thriving community. Prospectors from all over the world were attracted to "the Paris of the North", including the famous writer Jack London and poet Robert Service. The former only spent a couple of months in Dawson, but many of his most renowned books, like *The Call of the Wild* and *White Fang* were based on his experiences from Dawson (Jarvenpa, 1998: 26-27, Osgood, 1971: 138-144).

For the Tr'ondëk Hwëch'in people, the years after the summer of 1896 were years of great change. As an increasing number of newcomers filled up their territory, the Tr'ondëk Hwëch'in people experienced both an external pressure and felt an internal need to relocate. Yet where would they go? Governmental inspector Charles Constantine wanted the Indians to be self-sufficient and not become dependent on help from the government. Bishop Bompas wanted to "protect" the First Nations from what he thought was the immoral behaviour of the gold diggers. Tr'ondëk Hwëch'in Chief Isaac was similarly concerned that the Tr'ondëk Hwëch'in culture would diminish if they became to close with the newcomers . After some negotiations between Chief Isaac, the Royal Canadian Mounted Police, the government in Ottawa and Bishop Bompas, the Tr'ondëk

Hwëch'in people moved in 1897 to the former Tr'ondëk Hwëch'in traditional dwelling site "Moosehide", 5 kilometres downriver from Dawson (Dobrowolsky, 2003: 20-25).

However, the once enthusiastic founders of Dawson soon heard rumours about another great discovery of gold in Nome, Alaska. Just as soon as they had come, they left for another chance at making a life fortune. The number of inhabitants in Dawson dropped to around 9,142 in year 1901, and only 3,013 people resided in Dawson in 1911. A big city had been built, but it had been emptied of the inhabitants willing to cope with a subarctic climate. Dawson faced years of disintegration and decay. Still, the city continued to live on, and waves of new gold seekers came in line with new discoveries and improved digging techniques (Dobrowolsky, 2003: 20-28, Osgood, 1971: 13).

Life at Moosehide

After moving to Moosehide in 1897, the Tr'ondëk Hwëch'in people built residential cabins, food caches, a church and a school. Anglican missionaries taught the children at the "Moosehide Day School" when they were not out with their parents fishing, trapping or hunting animals. Even though they had a more permanent settlement at Moosehide, they continued to live off the land and travel on hunting and snaring trips. Every summer, the families would set up their fish camp across the river from Moosehide, among many other places, and fishing for Chinook salmon continued to play a major role in their lives. Former fishing techniques were replaced with nets and the Chinese-invented fish wheel. The traditional birch bark canoe was replaced with wooden boats (Dobrowolsky, 2003: 24, 29, 54, 61-63).

For decades, the two communities in Dawson and at Moosehide evolved with little interaction. In 1914, the first Indian Agent in the Yukon, John Hawksley, was appointed to govern "the Dawson Indians". He arranged to provide medical care and social services to the people at Moosehide. Chief Isaac was the primary mediator between the two communities. One of the chief's primary concerns was newcomers overhunting and overfishing, thereby affecting the Tr'ondëk Hwëch'in´s access to animals. For instance, in 1915, the Tr'ondëk Hwëch'in took only 70 caribou, while the Dawsoners shot nearly 3,000 animals (Dobrowolsky, 2003: 30-42).

The first boundary marker between Alaska and Yukon was set up by William Ogilvie already in the winter of 1887/88. The boundary that evolved over the next 25 years followed the 141st meridian, and cut straight through the Tr'ondëk Hwëch'in

hunting territory. The approximately 100 000 m2 that the Tr'ondëk Hwëch'in people once lived on was divided into two nations, making them citizens of two separate nation-

Moosehide in 2013

states. One famous story that I heard many times during my stay in Dawson was about the potlatch during which the indigenous population on each side of the border said goodbye to each other. They sang and mourned for three days, believing they would never see their friends and relatives again. Many people cut off their hair when they put their heads into the fire, a Tr'ondëk Hwëch'in expression of mourning. Even though they could still, with some effort, travel across the border, the boundary created a separation of the indigenous people on each side of the border that has continued until the present day (Dobrowolsky, 2003: 43-44).

The new international border was drawn only 100 kilometres from Moosehide. It not only cut the Tr'ondëk Hwëch'in off from their relatives, but also from their land and hunting grounds. Because the old Tr'ondëk Hwëch'in lifestyle required a vast area of land, traditional movement started to become limited during this period. National fish and game regulations put further constraints on fishing and hunting within the newly formed Yukon Territory. For instance, in 1933, the Tr'ondëk Hwëch'in were only allowed to fish for subsistence, and had to obtain a licence if they wanted to sell their fish - but the licence would cost more money than one person could possible make during a single salmon season. Similarly, the Yukon game laws were applied to all Yukon residents in 1938, thereby making the Tr'ondëk Hwëch'in people subject to the same hunting laws as the non-native population. They could only take the number of animals that the government deemed acceptable. In 1950 all Yukon residents had to register and pay a

fee to trap in trap lines. The Tr'ondëk Hwëch'in were encouraged to be self-sufficient and live like their ancestors, but at the same time, restrictions were put on their lives (Dobrowolsky, 2003: 44-46, Mc Clellan: 91).

Anglican missionaries had been teaching the Tr'ondëk Hwëch'in children at the Moosehide Day School since its founding in 1898. From 1908 and on, bureaucrats from the Indian Affairs introduced residential schools to First Nation children. The idea was to give the children a better education than they would have gotten by remaining with their semi-nomadic parents. Children from Moosehide were sent to the Choutla Residential School at Carcross, 603 kilometres south of Dawson. Many would stay there for the entirety of their school-age years, spending only summers with their parents. At school, they often lacked care and healthy food, buildings were in poor condition and they were punished if they spoke their mother tongue. When the children came back as adults, their parents and their parent's lifestyle was foreign to them. The Hän language was lost in this assimilation process, along with much of Tr'ondëk Hwëch'in cultural knowledge (Dobrowolsky, 2003: 54-58). As Elder Victor Henry put it in 1993, "We lost all our tradition. Never found it back" (sited from Dobrowolsky, 2003: 55).

A more positive effect of the Residential School experience, as investigated by Lomawaime (1994) and Miller (1996, 2000), was that the opposition towards the teachers and system created a strong, pan-Indian bond between the children. The later rise of the land claim movement is seen by some scholars as a result of this resistance and solidarity (Lomawaime (1994) and Miller (1996, 2000) in Nadasdy, 2003: 46).

During these years, Dawson became a small town, although the population rose somewhat during the summers. When the Japanese hit Pearl Harbour during World War II, Alaska became important land to the United States. Hundreds of soldiers were sent north to build the Alaska highway. The highway was built within one year, starting in Northern British Columbia, going through all of the Yukon to Alaska. Up until then, the Yukon River had been the sole means of transportation in the Yukon. The highway brought new wealth to the southern part of the territory. Whitehorse became the territory´s new hub, with 3500 inhabitants in 1947, while only 800 people resided in Dawson. As a result, the capital of the Yukon was moved from Dawson to Whitehorse in 1953 (Dobrowolsky, 2003: 93-95).

The Move from Moosehide

As the years passed, an increasing number of Tr'ondëk Hwëch'in started to see the advantage of living closer to where the paid jobs were in Dawson. From the 1950s, people gradually moved out of Moosehide. Moosehide was left for recreational use, and it continues to be a place where many Tr'ondëk Hwëch'in spend their summers and holidays (Dobrowolsky, 2003: 98-99).

The move back to Dawson was not unproblematic. There, the Tr'ondëk Hwëch'in were provided with poor government housing. Tr'ondëk Hwëch'in competed for paid jobs but were often discriminated against. Many children also experienced the educational system as being discriminatory. For the Tr'ondëk Hwëch'in children to attend school, their parents had to stay in town. This put an end to their nomadic lifestyle for good (Dobrowolsky, 2003: 98-100).

The post-war years, and especially the 1970s, have often been referred to as "the dark age" in Dawson, both in the ethnographic literature and according to the locals. Anthropologist Robert Jervenpa reports from his field work in Dawson in 1972, that drinking and fighting seemed to be an everyday occurrence in Dawson. The title of his chapter on Dawson in the book *Northern passages* (1998) is revealing enough: "Subarctic Skid Row". Only 700 people lived in Dawson in 1970 at the population's summer peak, and out of these, 200 were Tr'ondëk Hwëch'in. There were few job opportunities and many referred to Dawson as a "welfare community". Fur prices were at an all time low, and most people had given up their trap lines. Despite this, a few families would set up a fish camp and operate their fish wheels during the summer. They would fish salmon for both subsistence purposes and for sale (Jarvenpa, 1998: chapter two, Dobrowolsky, 2003: 46, 67).

Land Claims and Cultural Revitalization

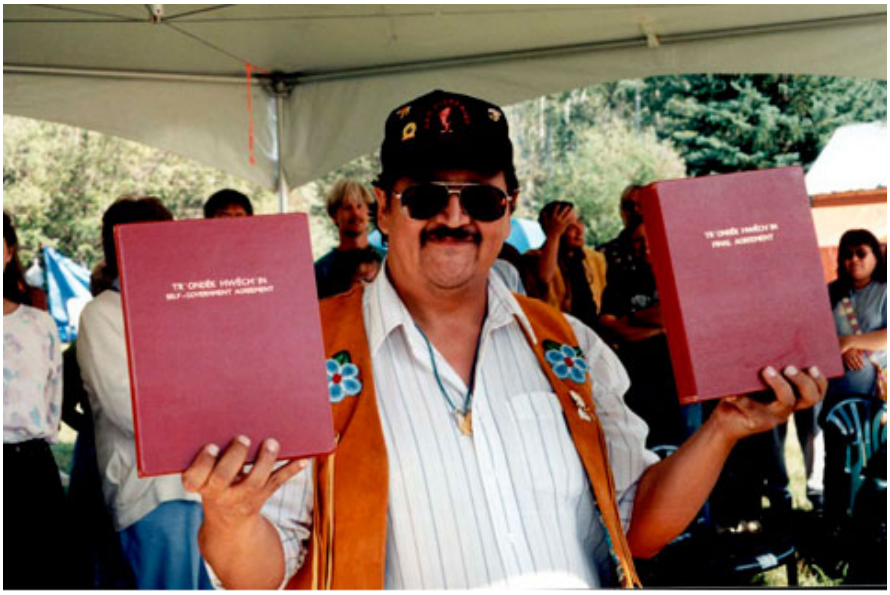
During the 120 years when the Tr'ondëk Hwëch'in territory had gradually become a part of Canada, they had paid little attention to national politics. In the late 1960s and 1970s, some of the First Nation Elders in the Yukon started to think that something had to be done to ensure a better future for their children. They felt that despite having welcomed and taken care of the newcomers many years ago, which included helping them with food and shelter and to survive in the extreme Yukon climate, they had received little in return. In order to be able to speak with one voice, the Yukon Native Brotherhood (YNB)

was formed the late 1960s. YNB demanded that they get back a fair share of the land where they had once lived. On May 24, 1997, after 23 years of negotiations, the Tr'ondëk Hwëch'in signed their *Final Agreement* with the Canadian state at a big feast in Moosehide. The agreement stated that they owned the area that is called "Settlement Land", and that they held the rights to the resources within the area named "Traditional Territory." The right of the Tr'ondëk Hwëch'in salmon fishery to have priority over other fisheries was also stated in the agreement. The Yukon Salmon Sub-Committee was created in 1995 as an advisory body to include both First Nation people and non-First Nation people in salmon management (Dobrowolsky, 2003: 98-102, 111, McClellan: 94-95).

The negotiation process and the *Final Agreement* led to a revitalisation of the Tr'ondëk Hwëch'in

culture. A new sense of pride from the old way of living emerged. The Tr'ondëk Hwëch'in community started working together with linguists to salvage their Hän language, and with archaeologist to discover the old Tr'ondëk Hwëch'in dwelling places. The Tr´ochëk Archaeology project discovered numerous stone tools at Trochek in 1999 (Dobrowolsky and Hammer, 2001: 28). Several businesses were set up to employ the Tr'ondëk Hwëch'in and manage the natural resources. Chief Isaac Inc. was established to incorporate the different Tr'ondëk Hwëch'in business endeavours, like Hän Construction and Hän Fisheries, which processed the extensive commercial Chinook salmon fishery (Dobrowolsky, 2003: 102-111).

In the 1980s, several fishers purchased commercial fishing licences and fished for Chinook salmon during the salmon run every summer. One former fisherman I spoke with in Dawson estimated that between 30 and 50



Cheif Steve Taylor at the official signing at Moosehide. Photo: trondekheritage.com

fishermen had been fully employed during this period. Each man would fish as many as a 1,000 fish every day during the run. Another fisherman recalls that he fished up to 500 pounds (226 kilos) of salmon every year. Hän Fisheries would travel with a boat and later a truck to the fish camps and buy the salmon from the fishermen. The salmon was taken back to the Hän Fisheries fish plant in Dawson, processed and sold to both the local and international markets. Chinook salmon was on the menu in every restaurant in Dawson in the 1980s, according to one fisherman. During these years, many Tr'ondëk Hwëch'in learned about the cutting and processing of Chinook salmon in the fish plant, in addition to their family´s fish camps (Dobrowolsky, 2003: 102-111).

From the 1950s onwards, Dawson City went through the same ideological transformation as the Tr'ondëk Hwëch'in. The city began to capitalise on the gold rush history to draw tourists to the area. The Klondike Visitors Association was formed in the early 1950s. When the federal government opened a Parks Canada office in Dawson, millions of dollars made large scale rehabilitation possible. In the 1970s, The Palace Grande Theatre from 1901 was entirely rebuilt and refurbished to resemble the original building as closely as possible. They opened up one of the historic dredge machines, "Dredge Number Four" in Bonanza Creek. Since then, the number of tourists has grown every year, and in 2013, around 60 000 came to see the old gold mining town.

The Decline of Chinook Salmon

As the Tr'ondëk Hwëch'in gradually returned to "Tröchek", the Chinook salmon faced more challenges. Beginning in the early 1990s, fishermen started to notice that the salmon had become smaller. In addition, the average number of salmon had become noticeably reduced. This pattern repeated itself every year from 1998 until the present day. From 1989 to 1999, the average Chinook salmon run was 320 000 salmon. From 1999 to 2007, the average run was around 200 000 salmon, while from 2007 until 2013, the average run was 135 000, according to the federal DFO.[18]

Most of the commercial fishing was shut down from 1998 to 2000, with only a few openings until 2005. The Hän Fisheries Fish Plant closed its doors in 1993 after 20 years in operation. The local restaurants made other arrangements in order to have fish on their menus. There was still a demand for fish, but the fishermen could not meet the demand. Gradually, the commercial fishermen found other ways to make a living. During

[18] Yukon River Salmon Fisheries Outlook, 2013: 2

the past 10 years, only people of First Nation origin have been allowed to fish for subsistence and cultural use, which is one of the rights stated in the *Final Umbrella agreement*.

Conclusion

The 150 years that have passed since the arrival of the first newcomers in Dawson has been a time of radical change. The most intense period during the Klondike Gold Rush dramatically transformed Dawson and the lives of the Tr'ondëk Hwëch'in in just a year and a half. The miners' occupation of the fishing camp at Tr´ochëk forced the Tr'ondëk Hwëch'in away from their ancestral grounds and has changed the seasonal practice of fishing there ever since. The more subtle changes that arose from the development of the Canadian state to incorporate Dawson and the Yukon also had deep impacts on the lives of the Tr'ondëk Hwëch'in people and the non-First Nation people alike. Both international and territorial borders were drawn. The Dawsoners became subjects of the nation-state of Canada. The state implemented fishing and hunting regulations, and made attempts to assimilate the indigenous population into the state with education and welfare. The Tr'ondëk Hwëch'in integrated Christianity into their religion, and moved away from their nomadic lifestyle to a city life in Dawson together with the non-First Nation population.

The knowledges that are explored in this thesis have been shaped by these historical meetings and negotiations. Knowledge about salmon today rest on the historical meetings between humans (state agents, First Nation people and non-First Nation people), and historical meetings between humans and salmon. This chapter has showed that salmon has been important to the people in Dawson in the past. The next chapter will describe that this importance is not only of the past.

Chapter Four: The Importance of Chinook Salmon

One summer day, I had been given some left-over Chinook salmon after a funeral potlatch. I left it on a bench while I was doing volunteer work at a community event. "What are you doing?" a non-First Nation woman asked me. "-You can´t just leave Chinook salmon like that! Somebody might steal it." Steal it? I thought to myself. In Dawson? Where people left their cars with the keys in them, even running? Where toboggans full of groceries were left outside of buildings unwatched and where literally no one locked their houses?

This incident, to me, indicated the value of Chinook salmon. When I first arrived in Dawson, I was puzzled by the fact that everybody talked about the decline of one type of salmon, when just a couple of weeks later, thousands of another type of salmon swam past, only to be ignored by hundreds of salmon fishers. I had not yet realised that this differentiation between salmon species was culturally vital. The fish that was ignored was *Chum salmon*, while the salmon that was fished was *Chinook salmon*.

Both the Tr'ondëk Hwëch'in and non-First Nation population in Dawson were referring to Chinook when they used the generic term "salmon". If they spoke about Chum salmon, they would always specify that this was the case. If salmon appeared on a decoration or in a photograph from the past, the depiction would be of a Chinook salmon. Eating Chinook salmon was treasured by the entire population in Dawson. The local name for Chinook salmon, "King salmon" or simply "Kings", indicate such worth. Chum salmon, on the other hand, was mostly perceived as being food for dogs. The population in Dawson would commonly call Chum salmon "Dog salmon". In the old days, Chum salmon had mostly been fished to feed dogs and dog teams. However, as I will show later in this section, this perception was about to change.

The relationship between salmon and humans depend historically on the relationships between salmon and dogs. To understand the importance of Chinook salmon in Dawson and the impact of its decline to the local population, it is necessary to investigate Chum salmon, in both a historical and cultural sense. After doing this, I will examine Chinook salmon as a marker of identity and as a narrative of the past.

Historical Chum Salmon-Dog Relations

According to Peter Loovers, dogs have been present in the Subarctic for more than 1000 years. It was not until the 1800s that people started to use dog teams as a means of transportation, a development spurred by increased trade in the North, the arrival of prospectors and missionaries and, finally, the use of dog patrols by the Royal Canadian Mounted Police. People also used dog teams on their trap lines, in order to meet the demand from the growing fur trade. These dogs were "working dogs", not pets. They were not cuddled. Working dogs were common until the 1970s-and 80s, when the snowmobile would largely take over as the favoured means of transportation. Loovers estimates that there were over 500 working dogs in the small community of Fort McPherson, just north of the Yukon border, in the 70s and 80s, while today, only a few remain.[19]

I heard many accounts of working dogs being fed Chum salmon in Dawson in the past. From August to September, people would set up the same nets or fish wheels they had used in the Chinook fishery to fish for Chum salmon for their dogs. They would dry or ferment the Chum salmon. To ferment it, the entire fish was stalled in a large pile without being processed. After a while, the heat emanating from the salmon starting to rot caused the fish to partially cook. The pile would freeze when the cold hit in September, and then it would be cut into pieces that would be fed to the dogs. According to one Tr'ondëk Hwëch'in Elder, the dogs loved eating both dried and fermented Chum salmon. Because they would eat the entire fish, they would basically get all the nutrition they needed. When people travelled with their dogs, dried Chum salmon was preferred, because of their light weight and high amount of nutrition.

Chinook salmon at the Downtown Hotel

[19] http://yukon-news.com/letters-opinions/the-dog-days-of-yukon-summer

Current Chum Salmon-Dog Relations

As Loovers report from Fort McPherson indicates, the present situation in Dawson today has changed dramatically because of the introduction of the snowmobile. Today, dog teams are used for sport rather than out of necessity. In Dawson, there were a few people who raised and trained dogs to participate in sled dog races like the Yukon Quest and Percy DeWolfe Memorial Mail Race. They would sometimes feed their dogs Chum salmon, in addition to meat, other fish and dog food. According to one dog musher who had won the Yukon Quest prize for the most healthy dog team, Chum salmon was both the dog's favourite but also very healthy food for the dogs. "It makes their fur so nice and shiny", he said. One non-First Nation fisherman who fished Chum salmon regularly said he would always fish Chum salmon to give to the mushers as a gift. However, fishing Chum salmon for dogs was only carried out on a small scale, which made it more the exception than the rule.

Local dogmusher at the Percy DeWolfe Memorial Mail Race in Dawson

There were a few people who kept dog teams for transportation and recreational use. I occasionally saw a sledge full of groceries with four or five dogs in front pulling it over the Yukon River ice. I spoke to some people who had started out with one or two dogs, and all of a sudden, they had 12. If the owners could occasionally feed their dogs Chum salmon, it was a treat for the dogs, but the dogs' diet mostly consisted of pellets. The fisherman mentioned above was the only one in Dawson who fished Chum salmon at

a large scale. It can thus not be said that fishing Chum salmon for dog teams was carried out on a large scale in Dawson.

Most people in Dawson (both First Nation and non-First Nation people) had one or two dogs as pets. They were cuddled, slept inside and were considered "friends". Pet dogs would often be categorised as good or bad "bear dogs", that is, their ability to notify their owners of bears and keep them away. Dogs that attracted bears were said to be "bad bear dogs" or even "terrible bear dogs". The loss of a dog was perceived as especially hard if the dog was a "good bear dog". "How can I ever replace such skills?", as one Tr'ondëk Hwëch'in Elder expressed it. Pet dogs were mostly fed with dog food or dinner leftovers. If those leftovers were salmon, the pet dogs would eat salmon. In general, people found it to be an unnecessary amount of work to fish for Chum salmon, just to feed one or two dogs.

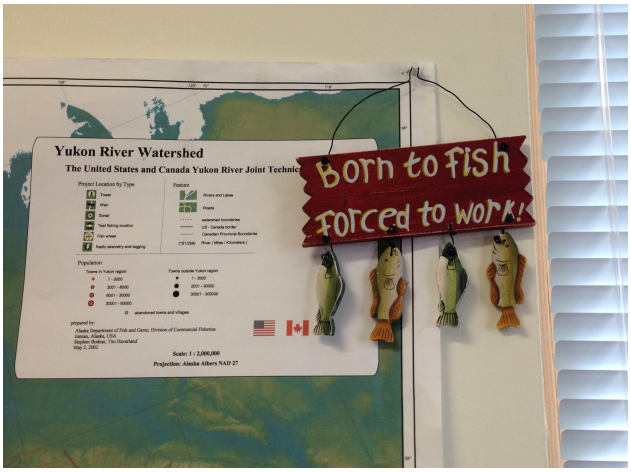
Despite the decreased use of Chum salmon as dog food, the link between Chum salmon and dog still remained. The common name "dog salmon" was still applied, and stigmatised Chum salmon. Eating Chum salmon was often viewed as being similar to eating dog food. One Tr'ondëk Hwëch'in Elder told me a specifically traumatic incidence from his childhood at the residential school when they were fed dog food – the chef had given them Chum salmon. Another women expressed it in the following way: "I don´t eat ´doggies´", when it was suggested that she fish for Chum salmon. In addition to the cultural stigma, the most common protest against Chum salmon was simply its taste. It was said to taste more "fishy" than Chinook salmon, to be drier and not as fat and rich as Chinook salmon.

However, the relationship to Chum salmon was about to change. The decline of Chinook salmon has forced people to reconsider Chum salmon as suitable food for humans. At the Yukon Salmon Sub-committee meeting in May, discussions arose on the different methods for encouraging people to eat Chum salmon. The creation of educational campaigns were proposed to remove the cultural stigma and to inform people of the advantages of eating Chum salmon. People discussed ways to make it taste better. Canning it, drying it and adding different tastes to it were among the suggestions. Both First Nation people and non-First Nation people stressed that using Chum salmon for human consumption could be a good way to continue to engage with salmon while the Chinook salmon was in decline.

Despite the cultural stigma, Chum salmon was served on several occasions throughout my stay in Dawson. Yet the controversy was apparent even then. I would always ask what kind of salmon was being served. Not only did I get the feeling that the question was inappropriate, but the way people answered would reveal their cultural perceptions of the different types of salmon. If Chinook salmon was being served, the answer was overcommunicated, and announced with pride: "This is Chinook salmon, of course!" If Chum salmon was served, the answer would not be announced with the same pride, but rather mumbled in a low voice or simply joked away. The historical use of Chum as dog food is clearly a reason for the reluctance to use Chum as human food. Yet perhaps an equally important reason might be the way it is always contrasted to its counterpart the Chinook salmon, that is, everything Chum salmon is not.

Chinook Salmon as a Marker of Identity

The strong historical link to the fishing of salmon and the important role salmon played in their lives in the past has made salmon one of the prime markers of what it meant to *be* a Tr'ondëk Hwëch'in. Tr'ondëk Hwëch'in Chief Darron Taylor explained it in the following way (as cited in chapter one): "We harvested salmon since the beginning of time, it´s a crucial part of our diet, part of our identity and culture, our language". He was speaking here about Chinook salmon. The fishing of Chum salmon for dogs, which has only happened for about one hundred years, is just a brief moment in time compared to the thousands of years that the Chinook salmon fishery has been carried out.



Sign at the Fish and Wildlife Office

As a Tr'ondëk Hwëch'in, you would most likely value the taste of the Chinook salmon, talk about salmon throughout the year and view salmon as being a central part of your tradition and culture. Caring for Chinook salmon was part of being Tr'ondëk Hwëch'in. In addition to being eaten as special food, traditional food, and as celebratory food, salmon had many other manifestations in the lives of the Tr'ondëk Hwëch'in throughout the year. Chinook salmon appeared in pictures, photographs, oral history and

in conversations. The cultural importance of the Chinook salmon was also expressed through historical narratives of the fish camps of the past.

When the older Tr'ondëk Hwëch'in and Tr'ondëk Hwëch'in Elders were invited to talk to younger children, they would often tell stories from their childhood about life at the fish camp. The declining run was one of the reasons that the building of large, temporary fish camps became unnecessary, in addition to the construction of roads, the creation of day jobs and the development of new technology such as coolers and freezers. Either the fish was gutted right on the riverbank and further processed in people´s homes, or it would be cut and processed at permanent fish camps, like at a person´s cabin or in Moosehide. Through the stories about the old days, fish camps and Chinook salmon appeared as *memory.*

The old fish camps were often talked about as places where families could bond across generations. Here, families would work together, carrying out separate but equally important tasks in fish processing. The men fished, and the women processed the fish, then dried it, smoked it or fermented it. At night, the families would sit down and enjoy some of the day´s catch. Elders would tell stories around the bonfire. The children would listen to their Elders' voices and feel that they were a part of something bigger than themselves. It was a time of abundant runs, of Chinook salmon bigger than one man could carry, of fishing in harmony with everyone else, native or non-native. When the Chinook salmon became rare, it became even more valuable. The children from the bonfire have become the Elders of today, but without the ability to teach the children about Chinook salmon in a "real" fish camp. The Chinook salmon in these stories, had become a primary identity marker of what it meant to be a Tr'ondëk Hwëch'in.

If Chinook salmon serves as a marker of identity for the Tr'ondëk Hwëch'in, it might equally be a marker of what it means *not* to be a Tr'ondëk Hwëch'in. According to federal law, due to the declining salmon run, it is illegal to catch, eat or receive Chinook salmon as a gift if you are not of First Nation origin. The non-First Nation population in Dawson would never express any relationship between being a non-First Nation Dawsoner and eating Chinook salmon.

Rather, they would stress other types of food as being markers of identity, largely related to the Gold Rush narrative and the focus on survival as described in chapter one. A person who stays in Yukon throughout all four seasons is said to be a "sour dough". The name derives from the early migrants who relied on sour dough to improve the

quality of their life during the long Yukon winters. Sour dough thus became the name for a non-First Nation person who was able to remain in the Subarctic climate year around. If the name was applied to a person, it would increase his or her status. The longer a person stayed in Dawson, the higher status that person had. How long a person had been living in the North was among the first things a non-First Nation person would tell me. I often learned that people would say that they had been living in the Yukon for longer than they actually had. Today, the status of being a sour dough was expressed in many ways. For example, the non-First Nation population in the Yukon have an annual "Sour dough rendezvous", sour dough was the main attraction in the Anglican church on Canada Day and numerous sour dough variations of food and names were found on the different bar and restaurant menus in Dawson.

There were two main views of Chinook salmon among the non-First Nation population: One side missed salmon and was frustrated that they could not eat it anymore. The lack of the ability to eat salmon made it valuable to them. A few people used the term "reverse racism" about their exclusion from the Chinook fishery. I first encountered this view when I took part in the salmon fishery myself. I soon learned never to brag about eating Chinook salmon, but rather to downplay any access to it. I hid Chinook salmon if I got it, and cooked it alone in my home. The other side did not express any regrets about their exclusion from the Chinook salmon fishery. They fished for other species in the lakes if they wanted to eat fish, including grayling, pike or lake trout. They did not express that they missed eating Chinook salmon, rather, they would think it was only fair that the Tr'ondëk Hwëch'in, with their long-lasting relations to Chinook salmon had priority in the Chinook salmon fishery.

Regardless of whether a non-First Nation person missed eating Chinook salmon or not, the decline in Chinook salmon made gave rise to a similar nostalgia towards the past as was the case within the Tr'ondëk Hwëch'in community. This was especially the case among the retired commercial fishermen. "The old days" were referred to as the time of abundance and wealth, first and foremost through two elements: the size of the salmon and the number. I heard stories about a fish being so big that one man could not lift it on his own. The salmon in these stories were strong, the catch portrayed as a struggle between man and fish, where sometimes the man would win, but equally often the salmon. One fisherman told me how he once thought his drift net had been stuck to the bottom of the Yukon River. He tried to release the net, when all of a sudden he

realised that the boat was not moving downriver, but upriver. A Chinook salmon had actually been caught in the net, and with its strong will to live, it pulled the entire boat upriver.

Another fisherman told me a story about a German tourist who came to his fish camp to buy a salmon in the 1980s. The fisherman´s wife was just done cleaning, and she said to the tourist that if she would bother to process another salmon, he would have to buy the whole fish. The German agreed, but became white as a sheet when the wife came back with the fish - almost 50 kilos! "We never see fish like that no more", the fisherman sighed. To the German's relief, his wife eventually let him buy just a part of the salmon.

I was told that the salmon run was so plentiful back in the day that the problem was not how to catch enough fish, but how to manage to process the fish before the next load came in. Salmon crowded together in the fish nets and fish wheels. Nets were pulled for hours just so the fish that had already been caught could be processed. The narratives about the past may or may not have become exaggerated. The important thing in this context is that these stories reveal that despite the decline, Chinook salmon continue to play an important role to the people who live in present-day Dawson.

Conclusion

Chinook salmon is important in the lives of both the First Nation and the non-First Nation people in Dawson, despite the fact that the Chinook fishery is restricted to First Nation people only. This chapter has explored the reasons why local people care about Chinook salmon by contrasting it to Chum salmon, exploring it as a marker of identity, investigating it as an expression of exclusion of the non-First Nation people and examining its past narratives. Because of the decline, Chinook salmon drew attention also from the federal government, that has applied special management strategies regarding the Yukon River salmon. However, this chapter has focused on the local descriptions of the importance of Chinook salmon.

If we agree that Chinook salmon is important in past and present day Dawson, it is understandable that people have such strong feelings towards it and opinions about salmon management. However, to talk about Chinook salmon in Dawson as one thing is misleading. The following chapter will reveal that Chinook salmon can be viewed as several things, depending on whether a person works for the Canadian bureaucracy,

belongs to the Tr'ondëk Hwëch'in community or lacks the right to participate in the Chinook salmon fishery as a person of non-First Nation origin.

Chapter Five: Perceptions of Salmon

In Dawson, salmon appeared to be fundamentally different within the three different knowledges outlined in chapter one. The answers to the question about what a salmon is and how it should be treated were distinct, and sometimes contradictory. The differences were found in both written publications and conversations, and in how fishing was carried out. For example, according to the bureaucratic knowledge, salmon was of either Canadian and Alaskan origin. To the Tr'ondëk Hwëch'in, salmon belonged primarily to Elders. It had to be shared within a system of reciprocity. This chapter aims to explore certain sets of differences in knowledge. I focus on the two main differences that I believe describe the disparate views on salmon.

The first difference is a fundamentally distinct view on what a salmon is. The Tr'ondëk Hwëch'in view fish and animals as sentient individual beings that cannot be completely distinguished from humans. On the other hand, the bureaucratic knowledge did not treat salmon as individuals. Rather, it treated salmon as groups or pulses, where the primary focus was on the number of fish. The non-native retired fishermen view on what a salmon was fell in-between these two views, perceiving the salmon as a complex and advanced creature, but distinguishable from humans.

The different views on what a salmon is affect the views about how the salmon should be treated. The second difference thus describes the relationships between the fisher and the fish. All three groups stressed that salmon should be treated with "respect". The difference lies in what the different groups mean by the term "respect". For instance, one technique that is encouraged by natural resource managers, "Catch and release", is viewed as being immoral by the Tr'ondëk Hwëch'in. Views on salmon management are discussed in chapter six, while how their management was carried out is the subject of chapter seven.

I will start the chapter by focusing on the abovementioned radical differences in human-animal relations, with an exploration of what a salmon means to the Tr'ondëk Hwëch'in by reference to their broader understanding of the environment. Second, I look at the Tr'ondëk Hwëch'in understanding of respect, and what it means to act in a

respectful manner. I go on to investigate the bureaucratic view of salmon as a generalised, species-specific fish that is divided into different management categories. This section will show that the bureaucracy applies the concept of respect in a different manner than the Tr'ondëk Hwëch'in. I then explore the view on salmon and respect that is held by the retired fishermen. Finally, I explore one meeting between the knowledges described in this chapter. The examples will tell us something about how the different knowledges are treated and their relationships to structural power. They can also reveal which types of knowledges are valued in co-management, and which ones are excluded from the discussion.

Tr'ondëk Hwëch'in Knowledge about Salmon

To be able to understand how the Tr'ondëk Hwëch'in engage with salmon, it is necessary to look at their broader understanding of the world, how animals, plants, humans and the environment are connected. In Tim Ingold´s ethnography from Finnish Lapland, he notes that the reindeer act upon people as people act upon reindeers. Animals are, as humans, sentient beings, according to the Finnish Lapps. They have feelings, they are smart and they have personalities. The relationship is of mutual advantage. Rather than having a hierarchical structure, where people control animals, the relationships emerge as primarily equal (Ingold, 1974: 523-525).

The Tr'ondëk Hwëch'in had a similar view of fish and animals. A speech by Heritage Department employee Georgette McLeod to the children at First Fish described this. She explained how Canadians have learned from science that everything is connected to each other, yet in a line. She used the example of the food chain, where humans are thought to be on top, followed by animals, followed by the animals' food, and so on. However, this is not how First Nations think, she said. McLeod emphasised that to the Tr'ondëk Hwëch'in, 'everything is connected in a web, where everything and every relationship is equal'. Salmon are for example connected to the Bering Sea, to bears and bacteria, to other fish, to the water in the river and to humans.

In this holistic world view, there is no absolute distinction between humans and animals, culture and nature, or ecological and non-ecological elements, as discussed in chapter one. The relationships between humans, fish, animals and water emerge as relational and equal, rather than putting humans at the top of the hierarchy. Animal

bodies and ways of thinking are different than those of humans, but they still have the potential to be intelligent beings.[20]

Tr'ondëk Hwëch'in Elder Percy Henry has said about humans that "We are not even animals yet." By this, he meant that animals can in fact be smarter than humans, as they have learned how to behave on the land while humans still struggle to figure out how to "manage" the land.[21] Many fishermen expressed that salmon were their teachers, that they learned about fishing from the salmon. "If salmon weren´t smart, how can they find the way all the way back to Dawson?" Tr'ondëk Hwëch'in elder Julia Morberg asked rhetorically. In Tr'ondëk Hwëch'in thought, because of the great distance salmon travel during their lives (swimming to the Bering Sea and back), people are believed to become smarter if they eat the salmon´s head, in addition to developing a better sense of direction.

Contrary to the bureaucratic focus on pulses and numbers of fish, in the Tr'ondëk Hwëch'in view, salmon emerge as individuals that can become your friend. The words of Mary McLoad, told to Cathrine McClellan in 1974, are explanatory:

> Animals too talk to people. One time weasel came to the door. He talk to me for a long time. "I don't know what you talk about. You must be telling me you're going to put up food for winter." He tells me that he is going to build a cache, then hunt and hide mice and things for winter. Then he goes away for a few days – a week. But he comes back.
>
> Other animals talk too. Porcupines sing songs and comb their hair with fingernails. They talk like people. Make all kinds of racket. Grouse call is like man talking. Coyote whistles like a man.
>
> So when you're in the bush you're never alone.[22]

When people fish, the salmon gives its life to the fisherman. Paul Nadasdy similarly stresses that the Kluane people compare fishing and hunting with a potlatch. One should accept the gift even if one does not like it, and be thankful (Nadasdy, 2003: 88). And with the gift come responsibilities and obligations, as the anthropological literature has shown in a number of studies (Mauss (1954), Nadasdy (2003), Kuokkanen (2005, 2007)). This reciprocity has severe implications for how the Tr'ondëk Hwëch'in carry out

[20] Yukon First Nations Heritage Management Framework, 2012: 12
[21] http://heritage.trondek.ca/2014/01/29/were-not-even-animals-yet-elder-percy-henry/
[22] http://heritage.trondek.ca/2013/11/15/when-youre-in-the-bush-youre-never-alone/

the entire process of harvesting fish before, during andafter fishing; it is fundamental when treating the salmon on any level. This responsibility was expressed through the norms that governed human behaviour towards salmon, which were stated as "showing respect towards the salmon". In the following section, I will explore the Tr'ondëk Hwëch'in meaning of respect.

The Tr'ondëk Hwëch'in Meaning of Respect

In order to show respect to fish, a number of norms apply when the Tr'ondëk Hwëch'in fish for salmon. First, these are mental and behavioural norms during the process of harvesting. Second, they imply a system of reciprocity that determines how the harvest should be distributed after it is processed. If one fails to be thankful to the salmon in a respectful way, the Tr'ondëk Hwëch'in think that the fish will turn around and stop offering themselves as gifts to humans.

Chinook salmon in buckets

Mental and Behavioural Expressions of Respect

To begin with, a person should never be in a playful or negative mood when one goes out onto the land. The person´s mood will influence the animals or fish and should be as neutral as possible. Because animals can hear what people say, they should never talk to or make fun of the fish they harvest or the animals you hunt. After catching the fish, a fisher should never play with it, make fun of it or talk bad about it - or anything that surrounded the fisher, be it a small bush, the fish net or the mosquitos that buzz everywhere around your head. A person should, for instance, never say: "Stupid knife!", even though the person cut himself/herself.

The salmon or its body parts should never be played with on any occasion, but treated as belonging to a sentient individual. When touching and processing the salmon,

the fisher should pay attention and act carefully. Fish that are still alive in the nets should be killed quickly, harming the fish as little as possible. When a fish would slip through someone´s hands and drop to the ground, this mistake was not commented on by any other participants in the fishery as long as the mistake was believed to be accidental. Body parts should not be stepped on. Blood must be kept away from places where people might walk. Special attention should be paid to the eyes. When the Tr'ondëk Hwëch'in hunt moose, it's head must be turned away from the rest of the body after it is cut off. The eyes must be punctured to save the animal spirit from seeing the cutting of the body. When handling salmon, one should similarly be careful with the salmon´s eyes. Failure to do so could bring lead to problems with one's own eyes later in life.

The famous story about the salmon girl (or boy) demonstrates the importance of refraining from playing with fish. I heard different versions of the story recounted on many different occasions, but always culminating with the same ending: A little girl with a necklace around her neck was down at the riverbank at a fish camp, and for a moment when her parents were not looking after her, she teased and played with the fish. Later that day, the girl disappeared. Her family looked everywhere, but she was nowhere to be seen. She had become a salmon and was forced to swim out into the oceans and live with the Chinook salmon stock. Several years later, at the same fish camp, her parents caught a fish that was wearing a necklace around its neck. The girl had been fished out and was allowed to return to her family and resume her human shape. The story was repeatedly told to the Tr'ondëk Hwëch'in children and bore a simple message: *Never play with fish.*

All fish gear and tables should be cleaned properly. When a child at "First Fish" was sad because she felt she had only been cleaning and had not actually taken part in fish processing, she was told that cleaning was just as important as any other stage in the process, if not the most important. Keeping the fish camp tidy and clear was a way of respecting the fish and fishing process. It was also a way to keep other animals away, especially bears. A person should never touch other people's gear, at least not without asking them for permission first. Finally, a hunter or a fisher should never step on the gear of other people, like rifles, fishnets or knives.

Any gift that is given to you must be accepted. It must be used, that is, eaten. To fish a salmon and not eat it was to show disrespect to the salmon. The Tr'ondëk Hwëch'in would never fish without the purpose of eating the fish. According to the Tr'ondëk Hwëch'in, the fact that sport fishers fish for salmon solely for the fun of fishing,

and then release it, hurt but alive, was viewed as playing with it and thereby acting disrespectfully. Ideally, all parts of the animal or fish should be used. In the past, the Tr'ondëk Hwëch'in used the entire animal they slaughtered. The meat and guts were eaten, as were some parts of the skin (for instance the moose nose and moose rectum), the hide was made into clothing, the bones into decorations, and the stomach was used to cook food (Dobrowolsky, 2003: chapter 1). Ideally, all of the fish parts would still get used, but due to the threat of environmental poisoning, the Tr'ondëk Hwëch'in would normally not eat the intestines today. They do however eat the meat, the heads, the hearts and the fish eggs.

Chinook salmon in a net at the Yukon River

The Tr'ondëk Hwëch'in prepared the salmon body parts in many different ways. Most often the salmon fillets were served cooked or fried, with vegetables and potatoes or rice. Sometimes the salmon fillets were cut into strips and smoked or dried, or both. The dried fish could be enjoyed as a snack for months. The fish heads were either eaten as a side to the salmon meal, or cooked into fish head soup. The hearts were a special delicacy with their taste of meat. One way to prepare the hearts was to fry them in a pan and eat them as a treat or a side dish. One man told me he loved eating salmon hearts as

a Saturday snack. The salmon eggs were most often cooked and eaten plain or made into other dishes. When cooked, they tasted like shrimp, pink and round, like small candies.

In the Tr'ondëk Hwëch'in community, it was important to express gratitude after receiving the salmon as a gift. Prior to every meal I ate with the Tr'ondëk Hwëch'in in Dawson, we would say a thank you-prayer. Most often the prayer was addressed to "the Creator" or God, but on other occasions, thanks was given to the fish or animal that had given themselves to the humans. The gratitude and the expressions of it also extended to the humans who were involved in the process of fishing, eating and socialising. If I made a meal, several people would thank me afterwards, and if I told a story, they would thank me for sharing it. I never went home from a potlatch or a social setting empty-handed. My house quickly got filled up with gifts: fresh and frozen meat, leftover food, coffee mugs, beaded jewellery, sweaters, jams, medicine. Ultimately, being thankful for the gift that was given to you, whether it be salmon or a coffee mug, and expressing it was important to the Tr'ondëk Hwëch'in.

No resources should ever be exploited. As a Tr'ondëk Hwëch'in Elder expressed it at Spring Camp: "Take only what you need, use everything you take." If one took more than necessary, one might be forced to abandon parts of the harvest. As illustrated above, to harvest a fish or an animal without the purpose of eating it is to act disrespectfully towards that fish or animal. At spring camp, one man told a story about a hunter who took three moose. "Why did you take three moose?" the man asked the hunter. "You don´t need more than one." As time went by, they saw two of the moose rot, and the hunter then understood the waste he had created. "I never saw that hunter take more than one moose again," he recalled. The hunter had been gently corrected, and learned from his experience.

A person should be aware not only of what he or she aims to harvest, but also of his or her surroundings. For instance, the plants next to the river are important in themselves, as food for other animals or as a habitats for insects or fungi. Finally, young animals should only be caught when scarcity forces you to take them. One should never shoot the leader of a caribou herd and always let the first Chinook salmon swim by, as these animals and fish are thought to be the strongest and thus most reproductive. Some Tr'ondëk Hwëch'in people called the first salmon "leaders". The next section will explore the second part of treating salmon with the proper respect: the system of reciprocity among the Tr'ondëk Hwëch'in.

Reciprocity

The mutual and respectful nature of the relationship between humans, plants, fish and animals was expressed through reciprocity between all parts. A poster on the wall at the Tr'ondëk Hwëch'in day-care which reads, "Remember to share your catch and you will

First Fish Community Dinner

become a successful fisher", illustrates how this important message starts to get implemented already at the toddler age. The animal or fish must be shared among both humans and animals. A child's first kill must always be given away in its entirety, preferably to the community's Elders. The first fish that is caught every season must be given back to the community. In 2013, the first fish was caught at Moosehide during "First Fish". Later that day, those first fish were prepared for the Elders. The following week, salmon was prepared and shared at the "First Fish Community meal", which was open to all citizens and visitors in Dawson. Overall, if an animal is caught or fish fished, it must be shared between friends, relatives and the community.

Sharing with Elders was especially important. This was a way to express gratitude towards the community´s knowledge holders and the knowledge they kindly share with younger people. It was also a way to give thanks to the people who have taken care of the young for a lifetime. When they are less able to go hunting or fishing themselves, they should be given help from the younger people. This reciprocity system

reveals the Elder´s dignity, and their important role in society. For instance, it was stated in the Tr'ondëk Hwëch'in norms that the reception desk in the main governmental building must provide Elders with snacks and fruits at any time when they come in to chat. Elders were served first at every community potlatch I attended, often by youth or younger adults. Among the Elders, it is always the oldest Elders who will be served first.

The parts that were not eaten by humans, that is, the skin and the intestines, were returned to the river to become food for birds, other fishes, bacteria and so on. Providing ravens with some animal or fish parts was especially important, as ravens are thought to be of a divine nature and creators of the world. At Moosehide, all food scraps were laid out for different animals, and the birds and squirrels that fed off the garbage cans just outside the cook shack came especially close. During my time in Dawson, I never experienced a slaughtering of an animal or fish gutting that did not contain this element of reciprocity between people and the environment.

Bureaucratic Knowledge about Salmon

As Nadasdy argued for anthropologists to treat any government as one "thing" is an illusion. The nation-state is rather an ideological process, "one that confers legitimacy upon the complex constellation of government institutions and processes that have many different (and often contradictory) agendas and interests." (Nadasdy, 2003: 4). This is familiar to all people living in a nation-state in the many ways that the state appears on an everyday level. The bureaucratic knowledge presented in this section is a compilation of all the different encounters that occurred between state agents and myself in Dawson. These meetings might occur when reading a brochure from the DFO, listening to a speech at a meeting or while I was talking to governmental employees.

Gro Ween argues with Kristin Asdal that environmental science and the management of natural resources cannot be dealt with separately because in legislative and management strategies, they appear and act together. While environmental management is and should be normative, science should not be. However, because management is given a scientific form through measurements and quantifications, a mixture of science and politics is inevitable. Environmental science in itself might not be political, but the actual politics of management are given a scientific form. It focuses on traffic, anticipated catch and number of fish caught. It involves prognoses and

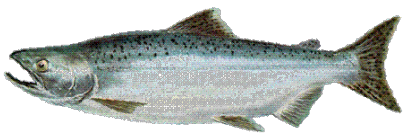
comparisons, and divides salmon into categories and results into reports (Ween, forthcoming: 7-8).

Similar to the argument from Ween and Asdal that environmental science and management of natural resources appear and act together, the DFO base their management strategies largely on biological knowledge about salmon. The management staff will always include a biologist who will make up the data and interpret them. Both the DFO office in Whitehorse and at the Eagle sonar station are employed by at least one biologist. This is why I start this section by describing salmon as a biological category, as presented in the written material from the Canadian government, before I explore the compartmentalization of salmon as harvest categories. The second half investigates what is meant by the concept of respect, when it is applied in the material from the Canadian government.

Overall, the data from the Canadian bureaucracy treat salmon in a generalised way. They are not looked upon as individuals, but rather as groups of fish that share the same attributes. The main focus is on numbers of fish, as stocks and pulses. Salmon management is based on the belief that salmon can be acted upon, managed and controlled, at least to a certain degree. This is done by a compartmentalisation and categorisation, that is, by dividing salmon into species, origin and harvest categories.

Salmon as a Biological Category: Chinook and Chum Salmon

According to the DFO, there are a number of different salmon species in the Yukon River. Most of the species spawn in Alaska and never swim as far upriver as to the Yukon. The two species of salmon that appear in Dawson are the Chinook Salmon (*Oncorhynchus tschawytscha*) and the Chum salmon *(Oncorhynchus keta*).[23] This differentiation of species is absolute. The management of salmon distinguishes sharply between Chinook and Chum salmon, they are counted separately and divided into different management strategies.



Chinook salmon

Chum salmon, Illustrations: DFO Canada

[23] Yukon River Salmon Agreement Handbook, 2005: 18

The Chinook salmon can be differentiated from other types of salmon primarily by its spotted tail and black gums. Chinook salmon is described as the "largest, most prized game fish", and they can weigh from 1.5 to 30 kilos, but usually they weigh from 5-20 kilos. The Chum salmon are smaller than the Chinook salmon, weighing from 4.5-6.5 kilos. Biologists can identify a Chum salmon by a white tip on the anal fin, along with silver in the tail.[24]

Chinook salmon live from three to seven years, while Chum salmon live from three to five years. They both start their lives as alevins, dug down in the gravel of a smaller creek or tributary to the Yukon River. When bred in a laboratory, scientists can watch how the small salmon will live off the yolk sac attached to their stomachs for a couple of weeks, before they emerge from the gravel as fry, feeding on small insects and plankton. Both Chinook and Chum salmon hatch in late winter or early spring. From the time of hatching, they will start their journey towards the mouth of the Yukon River. The Chum salmon starts the journey directly after becoming fry, while Chinook salmon will

Chinook salmon as fry

spend from one to two years in the Yukon River before they reach the Bering Sea. In the sea, they spend their time growing rapidly, often doubling or tripling their weight during

[24] http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chinook-quinnat-eng.html, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chum-keta-eng.html

one season. The Chinook salmon spend from one to six years out at sea, while the Chum salmon spend between 2 to 5 years there.[25]

When the Chum and Chinook salmon become sexually mature adults, they swim back to the mouth of the Yukon River and start their journey back to their birth stream to spawn. The Chinook salmon run happens first during early summer, and the Chum salmon follow directly after. This makes the Chinook salmon common in the Yukon River in July and August, as are the Chum salmon from July to October. Some salmon travel as far as 2,960 kilometres, making the journey one of the longest salmon migrations in the world. How the salmon navigate is not fully known, but some evidence suggests that they use the Earth´s magnetic field as an indicator. When they get close to their birth stream, they use their sense of smell to find their exact stream. They cease to eat on the entire journey, solely living off the high amount of fat in their bodies. If they are Chum, the colour will shift from silver to green or rainbow-colored when they get closer to the creek where they were once hatched. If they are Chinook, their colour will become dark pink or deep red.[26]

When they reach their birth stream, the female fish will dig a nest in a pile of gravel and drop her eggs. One or more male fish will follow and fertilize the eggs with a cloud of sperm released on the eggs. Directly afterward, the Chinook and Chum salmon end their lives next to the nest. The eggs spend the winter developing, before they hatch and start another journey towards the Bering Sea. Only 10 percent of the eggs survive to the fry stage, and from the thousands of eggs, only two to six adults live to make it back to the spawning beds. The salmon´s low survival rate makes them an important source of food to animals and other water species.[27]

Management Categories of Salmon

Gro Ween describes from her work in the Tana River in Norway how new technological methods gave the salmon a scientific form in the 1970s. Ween illustrates this in demonstrating how the Norwegian fish plants have divided the Norwegian salmon into two categories: farmed and wild salmon (Ween, forthcoming: 3, 17). With the development of the Canadian state and its various departments, new biological

[25] Yukon River Salmon Agreement Handbook, 2005: 18-19, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chinook-quinnat-eng.html, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chum-keta-eng.html
[26] Yukon River Salmon Agreement Handbook 2005: 18-19, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chinook-quinnat-eng.html, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chum-keta-eng.html
[27] Yukon River Salmon Agreement Handbook 2005: 18-19, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chinook-quinnat-eng.html, http://www.pac.dfo-mpo.gc.ca/fm-gp/rec/species-especes/chum-keta-eng.html

categories have also been invented in the Yukon. The next section aims to explore the different management categories that apply in salmon management.

Canadian and Alaskan-Originated Salmon

Because the salmon in the Yukon River live their lives in two countries, a distinction is made between the salmon that are thought to be of Canadian origin, meaning the salmon which were both hatched and return to spawn in Canada, and those of Alaskan origin, which do the same in Alaska. In addition to DNA samples from the fish, the treaty between Canada and the United States, the *Yukon River Salmon Agreement,* estimates that 23-26 % of the salmon belongs to Canadians, while 77-80 % belongs to Alaskans. These fish are commonly called "Canadian salmon" and "Alaskan salmon".[28]

When the DFO count salmon, they use the category "Expected Total Canadian Run" about the number of salmon they expect will be counted at the Eagle sonar station located at the border between the two countries. "Border Escapement" is the actual number of salmon that escape all U.S. fisheries and reach the Canada/US border, which are the fish that is counted at the Eagle sonar station. These numbers form the basis of the management strategy of Chinook and Chum salmon in the Yukon Territory. "Spawning Escapement Target" indicates the number of fish the DFO aim will spawn in Canada. If the "Spawning Escapement Target" is lower than the "Expected Total Canadian Run", the differentiation will constitute the amount of fish that can be separated into harvest categories, called "Total Allowable Catch".[29]

Harvest Categories

After the amount of salmon is set within the "Total Allowable Catch", it is then divided into five harvest categories: Test Fishery, commercial fishery, domestic fishery, recreational fishery and First Nation fishery. A Test Fishery would be carried out for scientific and management reasons, by the DFO or DFO contractors. Commercial fishery refers to the fact that a commercial fishing licence needs to be secured in order to sell fish. Domestic fishery means fishing for a household, while recreational fishery means fishing for sport. First Nation Fishery, also called Aboriginal fishery, is the salmon

[28] Yukon River Salmon Agreement, 2001: 11
[29] Yukon River Management Outlook, 2013: 2, DFO Integrated Fisheries Management Plan, 2009: x-xi

allotted to the Tr'ondëk Hwëch'in to harvest for "subsistence" use, that is, for food, ceremonial and cultural purposes. [30]

The DFO will plan its seasonal management strategy based on the "Expected Total Canadian Run". During summer, the management strategy can be modified in accordance with the "Border Escapement", the number of fish that are actually counted at the Eagle sonar station. These two numbers determine which fisheries will be open. DFO operates with three zones in this regard: the green, yellow and red zones.[31]

The green zone meant that more than 51 000 Chinook salmon have to cross the border into the Yukon. In the green zone, the First Nation Fishery would be unrestricted, whereas the recreational fishery, domestic fishery and commercial fishery would be allowed as long as they were "consistent with the International agreements on harvest shares". The yellow zone applied when the border escapement ranged from between 30 000 - 51 000 Chinook salmon. All fisheries except the First Nation Fishery would be closed if the run was placed in the yellow zone. The First Nation catch would be limited to 8000 salmon if the border escapement was close to 51 000, while at a run size of 30 000, it would be closed. In the final red zone, when less than 30 000 salmon crossed the border, all fisheries would be closed.[32]

The same three zones applied to Chum salmon, although with different numbers. The red zone would apply if less than 40 000 fish were counted at the Eagle sonar station, the yellow zone applied if between 40 000 to 73 000 were counted, while the green zone applied if the border escapement was higher than 73 000.[33]

Bureaucratic Views on the Concept of Respect

The publications from the Canadian government, similar to the Tr'ondëk Hwëch'in, all stress the importance of treating salmon with respect. It is the first rule of ethics in the "Yukon fishing Regulation Summary": "Treat the fish gently, with respect." However, as the following section will show, their usage of the term "respect" entails something very different than the Tr'ondëk Hwëch'in use of the term.

The brochure "Angling for the Future", published by the DFO, states that "Fish released today survive for angling opportunities tomorrow." The technique "Catch and release" conserves the salmon and is thus a part of the management of the recreational

[30] Yukon River Management Outlook, 2013: 5
[31] Yukon River Management Outlook, 2013: 5-6
[32] Yukon River Management Outlook, 2013: 5
[33] Yukon River Management Outlook, 2013: 7

fishery. DFO states that if a Chinook salmon is between 35 and 100 centimetres long, it has a survival rate of 85-90 percent. If the Chinook salmon is more than 100 centimetres long, it has a 85 per cent survival rate .[34]

"Catch and release" must be practiced according to particular rules to improve the salmon´s chances of survival. Only single-pointed, barbless hooks are permitted in the Yukon River. Anglers are also encouraged to use the right equipment. This includes long-nose pliers, to make it easier to remove the hook, and artificial lures to avoid deep hooking. If you catch a deep hooked fish, you should consider cutting the line. Anglers are encouraged to release the fish quickly and treat it gently, with respect. The hook should be removed gently and fast, using pliers. Fishers should avoid touching the fish´s gills and the stomach. All fish, and especially large females, should be released as quickly as possible, right after a quick photo is taken. The fish should be brought in quickly and handled as little as possible, always with wet hands, to limit the stress on the fish. Exposure to the air should be limited. Fish should be released in shallow water to limit changes in pressure. Similarly, fish should be released in water that holds the same temperature as where they were caught, preferably cold waters. The angler should hold move the fish slowly back and forth in the water before letting it go, in order to run water through its gills. Live release should be practiced in moderation. Fishing in schools of spawning fish should be avoided.[35] In contrast to the view of the Tr'ondëk Hwëch'in , as long as released fish are treated with respect and released in the least harmful way possible, doing live release is not a disrespectful act.

The Yukon Fishing Regulation Summary states that the fish that are not released should be killed immediately, hitting the fish head just behind the eyes. Keeping the fish alive is "not respectful". It further states that "It is an offence to injure or molest fish."[36] A fish that is bleeding or fatally injured should be kept, as long as it does not violate the catch limits. To achieve the best result, the fish should be gutted immediately, the fillets should be wiped with paper towels (not rinsed in water) and the meat should be frozen as soon as possible. If you choose to gut the fish later, is should be bled immediately. It is unlawful to abandon or waste any edible fish, however, it is not unlawful not to eat the head, tail, fins, bones or viscera.[37]

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[34] http://www.pac.dfo-mpo.gc.ca/publications/docs/future-avenir-eng.html
[35] Yukon Fishing Regulations Summary, 2013: 24, 42
[36] Yukon Fishing Regulations summary, 2013: 24
[37] Yukon Fishing Regulations summary, 2013: 42

Non-First Nation Knowledge about Chinook Salmon

Categorising knowledge as non-First Nation knowledge captures a highly heterogeneous group of knowledge holders. Where the Tr'ondëk Hwëch'in could look back at a thousand year-long settlement in the area, the non-First Nation group contained everyone from those whose grandparents had moved to Dawson, to those who were only in Dawson for a couple of months during the summer. Because they could not take part in the Chinook salmon fishery, Chinook salmon were not materially apparent in the lives of the non-First Nation group. However, this did not mean that salmon was not apparent in their immaterial form, in people´s minds and in their conversations. In this section, I will focus on the one group that I found had the closest immaterial relationship to Chinook salmon: the retired commercial fishermen, whose knowledge of salmon was obtained through years of fishing. Ever after 2005, the commercial fishery had been closed down permanently. To the retired fishermen, the story of Chinook salmon was also a story about loss.

Retired Fishermen´s Knowledge about Salmon

Initially, the former commercial fishermen fished for Chinook salmon as a way to make money. For a person who had come to Dawson to stay in the wilderness, fishing provided him or her with a good opportunity to make a living out of a life in the bush. One former commercial fisherman explained his way into the Chinook salmon fishery in the following manner:

> I had a poor business plan, I thought I could make a living on the river with a boat, cutting firewood. It didn´t work. When I realised it didn´t work I had a boat and payments to make to the bank and no income, and I needed some other way to make money with my boat. So I asked people who were fishing if they needed someone to help them who had a boat. Someone had a fishing licence but no boat, I had a boat but no licence, so we worked together and then eventually I was able to get my own licence.

Another fisherman got 35 Chinook salmon in the 1970s that he cut into strips and smoked. The fish strips turned out so well that the fisherman realised he could make money on them. The next year, he obtained a fish wheel and a licence and continued to fish for more than 20 years.

Involvement in the commercial fishery required the fishermen to stay close to their fish wheels or nets during the Chinook salmon run. More than a job, the fishermen described their experiences as commercial fishermen as a way of life, a lifestyle. One fisher called himself and his fishing fellows "bush hippies". After years of working with salmon, they developed an extensive and intimate knowledge of the salmon. Their involvement in the fishery caused their perceptions about salmon to be different from both the common non-First Nation population and the government.

While the DFO would use DNA tests to figure out where a salmon originated, the fishermen would rely on their own experiences by looking at the fish. One fisherman explained that:

> The further the fish has to swim, the more energy, Canadian fish are big and round and strong. And the fat, it´s a simple way of telling, the closer it is to the spawning ground, the less fat, it is more sexually developed, when it´s close to spawning the body changes, colour goes from silver to many colours, they get a hook on their nose, then I can tell if the fish is close to the spawning ground. If it is bright red, big hook on its nose, skinny tummy, eggs and milk come out of it, it´s a local fish.

retired fisherman fishing for Chum salmon

Rather than relying on biological knowledge, like the DFO, they would, like the Tr'ondëk Hwëch'in gather their knowledge from their experiences with fishing.

Through their engagement in the fishery, their relationship to the salmon became one of admiration and care. They perceived the salmon to be a strong and a complex being. They might not have thought that the salmon was an intelligent being, but it definitely had the potential to be smart when it approached their nets and fish wheels. One fisherman reported that he believed the Chinook salmon stayed together in groups, as he would often catch three or four salmon that were exactly alike, *A* which he believed to be siblings. Like First

Nation's people, these fishermen perceived salmon to be individuals, and not a species or pulse. Their admiration of the Chinook salmon made them believe that salmon should be fished and treated with the utmost respect. Their concept of "respect" both differed from and resembled the views of the Tr'ondëk Hwëch'in and the state bureaucracy, as shown in the next section.

Retired Fishermen´s Views of the Concept "Respect"

Similar to the Tr'ondëk Hwëch'in, the retired fishermen believed that no salmon should ever be teased or tortured, but killed humanely and cut with respect. The majority of them did not appreciate "Catch and release" as a fishing technique. To them, salmon was food. Fishing for sport reasons was only accepted if the fish was eaten, but to these fishermen, fishing was primarily work and not a sport. To fish with a rod was also seen as an inefficient way to catch salmon. None of the fishermen engaged in sport fishing. Second, they believed the fish is hurt when the hook was taken out of its mouth, even if it was a barbless hook or if the fish was never taken out of the water. "In essence it is torturing the fish", one fisherman said. Another retired fisherman said "it would be like teasing a moose, knocking it over, making a sport out of shooting it. "Catch and release" is immoral." One fisherman thought "Catch and release" would be less wrong if the released fish was sexually mature and likely to spawn after the release. Yet another fisherman had nothing against the catching and releasing of fish.

A second way of behaviour towards salmon was to share it. All the fishermen I talked to would always share their catch. They would not necessarily express it as a way of respecting the fish, just that "you are supposed to share salmon." Many fishers stressed that they had learned about sharing from fishing and working with the Tr'ondëk Hwëch'in. Most often, the sharing would be carried out within the familial sphere or among friends. Sharing salmon with the entire Dawson community was perhaps more an exception than the rule. One fisherman related that one Christmas, he had given a salmon to all of the citizens of Dawson. Sharing Chum salmon with dog mushers also occasionally happened, as the dog mushers who participated in competitions like the Yukon Quest were looked upon as Dawson ambassadors, and sometimes referred to as "heroes".

Finally, the fishermen's relationship to salmon involved them being nostalgic about the times when they were able to fish. During my fieldwork, fishing restrictions

meant that they had no opportunity to participate in the Chinook salmon fishery. Interestingly, the fishermen did not turn to recreational fishing. Only one of the retired fishermen fished for Chum salmon that he later sold to the Dawson population. He fished with a net because, as mentioned above, fishing with a rod was seen as inefficient and hurtful to the fish.

When Knowledges Meet

Thus far, we have seen that different people in Dawson have different perceptions of what a salmon is, and what should constitutes the proper relationship between salmon and humans. In the following section, I will examine one encounter between the different views on salmon that took place at a conference in Mayo. Such an investigation of the *meetings* between two different views may reveal the inherent power structures when knowledge seek legitimacy. Simultaneously, by looking at who is invited into the conversation, we may learn something about *non-meetings,* that is, concerning those who were never invited to participate.

Water Conference in Mayo

During the summer, I attended a conference in Mayo, the neighbouring village consisting of 280 inhabitants. It was hosted by the Yukon River Inter-Tribal Watershed, an organisation made up of more than 70 First Nations along the Yukon River[38]. The four days were filled with meetings, speeches, performances, meals and games, all with some connection to the Yukon River, water and salmon. On the last day of the conference, I heard a woman from the Yukon Environment speak. Her Power Point presentation explained the water strategy laid out by the Canadian government, which was sharing the responsibility between 21 different departments, councils and committees, and among them was Yukon Environment where she worked.

The following dialogue followed the presentation between her and a young First Nation man (the speech was recorded):

> **First Nation man:** I just wanted to know who´s in charge of what, cause you have one department, "Energy, mines and resources", who are doing the monitoring, who are doing the permitting, who are dealing with certain parts of the water, and then you have Yukon Environment which is more of a holistic environment, that´s doing the strategy. I was just a little curious about that, wondering if there is gonna be a switch to when it comes to implementation

[38] http://www.yritwc.org/About-Us/About-Us.aspx

of the strategy, to bring the people who are monitoring this away from the energy, mines and utilitarian and resource, who understand that water is part of the environment?

Yukon Government representative: We´re the lead on developing the strategy, Environment Yukon, so we´re gonna task with cheering and leading the strategic water initiatives through, which deals with the, tries to bring together all the areas who work from the different government, sorry, different departments within the Yukon government. So, we work together, or we work on the strategy together, so some of these action items might reflect the mandates of our department, some may reflect the mandate of another department. So, if anything, for example, water monitoring of claims, then that would fall to energy, mines and resources. All levels, from the different departments, we all have some rules, so health and social services is more in terms of drinking water, and so whichever area of work within the strategy is related to the department, that´s how the work will be undertaken, the strategy is a collaborative effort. The implementation will be overseen by the department of Environment, but there´s definitely departments that will be the lead in terms of a specific action item it it´s within their area of responsibility. Does that make sense?

First Nation man: It does, yes, I guess, my next comment I would like to make, if you could bring it back to the department is that, as it was mentioned here, what is going to be done for the salmon, and the quality of salmon for that, just to say that water is more than a resource that is attached with energy and mining, water is a part of the environment, and part of the people, and part of everything. So I just hope it (the strategy) encompasses more than just dealing with energy and the mines.

Yukon Government representative: For sure, it does, it covers the broad specs of it, it covers wanting to know more about our ground water and resources, it´s about collaboration, communication, it´s about the value of water, we´re trying to cover the whole, all values of water within the water strategy and trying to find the areas where we need to improve the work that we do. There isn´t a focus on a specific, it´s about water resources, within the gaps, some are identified, like working with stakeholders, where we need to improve what Yukon government is currently doing, and that´s where all the action items, came out of that.

First Nation man: Yes, thank you, I just, I´ll stop now. I was just trying to communicate a certain point there where water is more than just a resource, it´s a part of the environment, a part of salmon, a part of people, it´s connected to everything. So I just hope that it encompasses the entire scope, because sometimes you can lose, you can talk about the price of something, but you don´t understand the value that item. And I´m not talking about money, I am talking about the value of water.

This dialogue describes a clear difference in the perceptions about water and salmon. Each representative has concepts and understandings that rest on fundamentally differing world views. The representative from Yukon Environment had just held an hour-long speech about how water is managed in Yukon, involving 21 different departments, committees and councils. Water management is compartmentalised, which was explained when she stated the following: "there´s definitely departments that will take the lead on specific action aid within their area of responsibility". To the young First Nation man, this separation made little sense. In his view, water had to be looked at as one thing, regardless if one talked about building roads, drinking water or salmon habitat. Water, fish, animals and humans were all parts of a greater whole. Following John Law (2004) and Annemarie Mol (2003) from chapter one, the difference can be said to be ontological - it has to do with perceptions about *how the world is.*[39]

The overall theme for the conference was water, in an attempt to address the problematic aspects of the water situation in the region. Among the topics addressed were the decline of the Chinook salmon in the Yukon River. A number of speakers were invited, including environmentalists, politics, leaders of committees and government representatives. The hope was that meeting and talking would lead to an increase in understanding between all parts. The example shows that dialogue and interaction between different ontologies happen in the Yukon. It was my impression that both the government and local people wanted a dialogue because it was viewed as being important to understand the views of the other invested groups. What can be drawn out of the dialogue from above?

The First Nation man asked if the government representative "could bring it back to the department (...) that water is a part of the environment, part of the people, part of everything." He in fact wanted the governmental representative to take back to her department a holistic view on water. She replied saying that the water strategy *did* "cover the broad specs of it", that the different departments covered all aspects concerning water. There were of course areas where the work could improve, but, in general, the strategy addressed all concerns about water (drinking water, fish habitat and so on).

The suggestion by the First Nation man to look at water holistically was responded to with the claim that the departments together would cover all aspects

[39] For ontological differencies see also Cruikshank (1990) and Ween and Risan (forthcoming)

concerning water. The government employee stated that the government did address water "holistically" by compartmentalisation, that is, the 21 different departments, councils and committees that were involved. If the government representative would in fact “bring back to the department” the view offered by the First Nation man, and if her department fully took this view into consideration, it would still only make it to one of 21 institutions. Through this compartmentalisation factor, the holistic intent would lose its meaning. One might question whether it is at all possible to apply a holistic view in a field that is divided into 21 entities, where everyone has the responsibility for one small part of managing water. Whereas the First Nation man indicated that salmon and mining had to be managed together, the structure of the Canadian government divides them into "Energy, mines and resources", "Fisheries and Oceans" and "Yukon Environment", among others. What we see here is that different ontologies do not have the potential to intertwine into one kind of knowledge. Nor can they be translated into the other, because they rest on the different ontological premises of holism and compartmentalisation. The problem of translation, or even the impossibility of translation, which was discussed in chapter one, is clear.

The example also demonstrates the politics of TEK, as discussed in chapter one. While First Nation people are thought to have valuable knowledge about the salmon they have fished for millennia, they are not believed to have a significant knowledge about, for example, mining. It is only when dealing with natural resources, the "nature", that the local knowledge is held to be valuable. It is telling that the conference was about water, which in the western mindset is very much a part of nature. As explored in chapter one, conferences like the one described above indicate the continued focus on indigenous knowledge as ecological, and separate from non-ecological spheres of society (like mining). It reveals the struggle over "Indianness", and about the possibility and ability to change, as discussed in chapter one.

When Knowledges Do not Meet

The example also reveals a *non-meeting*. The primary participants in the meeting described above are government representatives and First Nations. This structure is embedded in the Yukon legislative, through the Final Umbrella Agreement. I described in chapter one how the strength of the nature/Native metonym in the management of wilderness makes it possible to exclude non-First Nation people as knowledge holders of

“nature”. Euro-Canadian people were present at the conference in Mayo by virtue of their education only, as scientists, politicians or government employees. They were not present as *fishers.*

Even though the non-First Nation retired fishermen in Dawson gained intimate knowledge about salmon due to their years of fishing, their knowledge did not fit into these processes of co-management. This fact illustrates how the nature/Native metonym appears in the making and conservation of Canadian wilderness, and how the metonym makes it possible to exclude non-First Nation people as "nature" knowledge holders based on their experience.

Conclusion

This chapter has described the disparate views on salmon that I found in Dawson, that is, the Tr’ondëk Hwëch’in, the bureaucratic and the non-First Nation knowledge about salmon. I showed that the three groups had different views on what a salmon is and what should constitute the proper relationship between humans and salmon. I argued, following Law and Mol, that these differences were ontological, because they are based on fundamental different world views. The are disparate ways to construct reality.

I further have explored one meeting between the different ontologies. The example showed the difficulties attached to the translation of the one ontology into the other, as they are based on respectively holism and compartmentalisation. This resemble the argument by Ingold, Ween and Riseth explored in chapter one, that LTK cannot be translated into MTK without being subject of change. The focus on salmon and water as subjects of conversation on the conference illustrates that the traditional aspect attached to indigenous knowledge apply in the Yukon. Finally, the example reveal how the native/nature metonym allows certain knowledges to be put in co-management (the bureaucratic and the Tr’ondëk Hwëch’in knowledge), whereas other knowledges (the non-First Nation "nature" knowledge) are kept apart. I argued that the structures of co-management allows for such exclusion.

The disparate views on what a salmon is explored in this chapter have implications on the views on how salmon management should be carried out, which is the theme for the next chapter.

Chapter Six: How should Salmon be Managed?

The issue of the declining Chinook salmon run had been addressed for 20 years upon my arrival in Dawson. According to the retired fishermen, they were the first to announce that the size of the fish was getting smaller in the beginning of the 1990s. According to them, their observations fell on deaf ears. The record low run in 1999 increased the awareness of a potential decline among the state agents, the First Nation population and the general non-First Nation population alike. It resulted in the formation of the organisation *Yukon River Drainage Fisheries Association* in December the same year, which is an organisation created especially to address issues about Chinook salmon.[40] The case was further addressed internationally by the signing of the *Yukon River Salmon Agreement* in 2001.[41] The DFO in Yukon started to put restrictions on the commercial fishery from the late 1990s and closed them down entirely from 2005. Restrictions on the recreational, domestic and First Nation fisheries followed. Despite these efforts, the anticipated run of 2013 was expected to be lower than ever before, both by the DFO and the local population in Dawson.

Most people in Dawson thus agreed that the management (carried out by DFO) and co-management (carried out between Tr'ondëk Hwëch'in and DFO) of Chinook salmon had failed. But why had it failed? This chapter starts with an investigation into the beliefs of the Canadian bureaucracy, the Tr'ondëk Hwëch'in and the non-First Nation population on why the salmon had been in constant decline. The reasons given for the decline were sometimes different and sometimes alike. However, even when the answers were similar, the argumentation behind the reason given was often different. Both the answers and the rationale behind them reveal the ontological differences outlined in chapter five. The beliefs are founded in fundamentally different perceptions about *how the world is.* I include an investigation of the three groups beliefs on what would constitute the best strategies to get the Chinook salmon run back to its previous heights.

[40] http://www.yukonsalmon.org/about/
[41] http://www.pac.dfo-mpo.gc.ca/consultation/yukon/yrp-cfy/index-eng.html

At the end of the chapter, I will examine what happens when views on salmon management contradict each other. Following my discussion of Michel Foucault from chapter one, I will look at which knowledges are *thinkable* and *unthinkable* in salmon management. The chapter focuses on Chinook salmon. The Chum salmon run was in good shape, and no management restrictions applied to the Chum salmon fishery.

Views from the Canadian Bureaucracy: Chinook Salmon Decline

The head of the DFO office in Whitehorse gave the following explanation about why the Chinook salmon was gone to the Yukon news in August 2013: "It isn't clear exactly what's causing the Chinook decline. Possible reasons could be water quality or climate change." (Yukon news 7. Aug 2013). In a later interview that month, she further stated that: "People always ask the question of, 'What's going on, what's happening?' My stock answer has to be, multiple causes in both marine and fresh water environments. Nothing leaps off the page and stands out. It's hard to say what exactly is causing the decline in Chinook salmon runs." (Yukon News, 30. Aug 2013).

According to the DFO "Integrated Fisheries Management Plan. Chinook and Fall Chum Salmon" from 2009, salmon is currently under a variety of threats, including "environmental uncertainty, habitat modifications and in some cases, overexploitation". The management plan specifically addresses the problem of by-catch in the Pollock fishery in the Bering Sea. The by-catch of Canadian-origin Chinook salmon is estimated by DFO to be as high as 40 percent of the salmon living in the sea.[42] Apart from this, DFO was reluctant to point to one single reason to cause the decline. The DFO manager further stated that "It's also hard to say whether the numbers will continue to drop, or if they might grow. There are trends. Over time we've seen declines in chum salmon, yet we're on a rebound on chum. That's the good news part of things." (Yukon News, 30th of August 2013).

From the DFO perspective, a concern and sometimes hopelessness were expressed that none of the management strategies had improved the situation for the Chinook salmon. One man involved in salmon management said what they really needed was the ability to give penalties when the Americans did not meet the "Border Escapement Goal", a goal that had not been met once since the signing of the *Yukon River Salmon Agreement* in 2001. To manage salmon in the Yukon River in Canada is actually

[42] Integrated Fisheries Management Plan, 2009: 18

to control only a small part of the river. The fact that the DFO management strategies had failed was partly caused by the fact that they could not fully determine the management along the whole river and the behaviour of people in both Alaska and Yukon, according to one DFO employee.

Another DFO employee explained that when employed in the government, you were bound to operate within the legal framework. His opinion was that all fisheries should be closed immediately, at least for a period of ten years. But as a part of the Umbrella Final Agreement, they would have to keep the Aboriginal fishery open as long as the number of salmon was placed in the yellow zone. He explained, as cited in the beginning of chapter one: "Instead of managing salmon, it is really about the management of human behaviour". Others would disagree on this, claiming that in order to maintain people´s interest in salmon, they had to stay involved in the fishery. A total exclusion from participating in fishing salmon would make people lose interest in the subject, and ultimately, in the worst-case scenario, not care about species survival. When people did not care, they might potentially take salmon illegally, he further explained.

An employee at the sonar station questioned the research methods that DFO used and said this could lead to misunderstandings and result in failed management. He explained the limitations of the sonar method. The Yukon River is brown from silt coming from glaciers. People never see the salmon before they are caught. The data coming from the sonar could be misinterpreted, as there was always the possibility that a stick in the water might be counted as a salmon. Finally, the data had to be read and interpreted by a human being, who is always in danger of being biased. Because the sonar station always contains biologists in its staff, it was held as a possible outcome that the data would be interpreted into the biological body of knowledge.

DFO neither claimed that they knew the full explanation for the Chinook salmon decline. It acknowledged the biological uncertainty that is present in any "live-case", which the large and complex management of the Chinook salmon in the Yukon River is. They could only do their best based on the data they held. Continuing to collect data and conduct studies on Chinook salmon was a priority for the DFO.

How Should the Chinook Salmon Run be Rebuilt?

According to the *Canada´s policy for conservation of wild pacific salmon* (2009), published by DFO, the policy for the conservation of wild pacific salmon has three objectives. First, it is to "safeguard the genetic diversity of wild Pacific salmon", second, it will "maintain

habitat and ecosystem integrity" and third, it will "manage fisheries for sustainable benefits."[43] In the Yukon, the management of Chinook salmon is based on these principles. The principal initiatives were to i) to limit fishing and ii) to gather information to broaden the general knowledge about Chinook salmon.

To limit fishing, DFO has formulated three allocation priorities. The first priority was to "attain escapement goals and maintain fish habitat that would result in optimum production of the stocks". The next priority was to "provide for the basic needs of the First Nation fisheries for food social and ceremonial purposes", while the final priority was to "provide salmon harvesting opportunities for recreational, commercial and domestic fishers."[44] As described in chapter five, DFO used three different zones when determining which fisheries should be opened. The Eagle sonar station was thus the main source for counting salmon and determining which category the year's harvest would be sorted under. The zones exist to make sure that a sufficient number of salmon will spawn and reproduce. As the season progresses, DFO takes the in-season run size into consideration to determine whether fisheries can proceed, must be adjusted or will be closed.[45]

To limit by-catch of salmon in the Bering Sea, bureaucrats worked together with the Pacific Fishery Management Council (PFMC). The organisation managed to reduce the "Total Allowable Catch" of Pollock from 1,4 million tonnes in 2007 to 1 million tonnes in 2008 in the Bering Sea sub-area, and recommended a further reduction to 815 000 tonnes. Another tool for limiting fishing was to include "Catch and Release" in the salmon regulations. "A released fish is better than a dead fish", one DFO employee explained. Sport fishers could only keep two salmon for each day of fishing, of which only one could be a Chinook. Salmon that increased the allocation limit had to be released into the river.[46]

To gather information about Chinook salmon, the PFMC has initiated a review process to "identify alternatives and options to limit the salmon by-catch in future years."[47] DFO would encourage and finance studies about the Pollock Fishery by-catch. DFO has further started to document the impact of sports fishing on Chinook salmon. In 1999, DFO introduced the "Salmon Conservation Catch Card". Irrespective of whether an

[43] Canada´s policy for conservation of wild pacific salmon, 2005: 9
[44] Integrated Fisheries Management Plan, 2009: 10
[45] Integrated Fisheries Management Plan, 2009: 15
[46] Integrated Fisheries Management Plan, 2009: 18
[47] Integrated Fisheries Management Plan, 2009: 17-18

angler kept or released the salmon, he or she was required to fill out a catch card and return it to the DFO. The card contains information about the date, location, species and sex, the presence of tags and of adipose fin, and the type of gear with which the salmon was caught. Such cards are obligatory and should be returned to the DFO office in Whitehorse before November 30th on the year of fishing.[48]

Views from the Tr'ondëk Hwëch'in: Chinook Salmon Decline

Overfishing in the Present and in the Past

The Tr'ondëk Hwëch'in also commonly explained the decline of the Chinook salmon as being the result of overfishing. People blamed the extensive commercial fishery that took place in Dawson during the 1970s and 1980s. Many of the Tr'ondëk Hwëch'in had worked at the Han Fish plant in the past and had seen with their own eyes the amount of salmon that was processed every year. However, responsibility was most often placed "downriver". The people "downriver" had access to the salmon first, and naturally had the opportunity to fish it before it reached Dawson. "Downriver" meant everywhere from Dawson to the mouth of the Yukon River. Because Dawson is located close to the US/Canada border, overfishing would mostly be attributed to the people in Alaska and fishers out at sea.

Salmon smoke shack

Alaskan overfishing was often explained by the different fish regulations in Canada and in the States. In Alaska, people of non-First Nation origin were believed to have more opportunities to fish for Chinook salmon, whereas in

[48] http://www.pac.dfo-mpo.gc.ca/yukon/rec/catchcard-carteprises-eng.html

Canada, all Chinook salmon fisheries were closed off to the non-First Nation population. "They (the non-First Nation fishers) would take as much as they can within the opening", one man explained to me. He further stated: "They do not have the ideology to care for the land, and traditional management of fish and animals are not embodied in their American culture." Rather, American non-First Nation people were perceived as being advocates for a capitalist world view, where the individual accumulation of wealth would be the primary goal. Others would argue that First Nations in Alaska also overfished, because many river communities in Alaska are not cities, like Dawson, they are roadless communities with limited job opportunities. In such communities, food is expensive and First Nation and non-First Nation people alike rely on what they can harvest from nature to obtain food security.

Most people with I discussed the decline with would bring up the by-catch in the Bering Sea. Trawlers out at sea would catch Chinook salmon when they were small and still developing out in the sea, while actually fishing for other species. Many referred to the concern expressed by the DFO about the Pollock by-catch. However, many felt that the Bering Sea was far away from Dawson, and hard to control or know anything about at all. "Who knows what the salmon does out there," a Tr'ondëk Hwëch'in man explained. "It might go all the way to Japan! Nobody knows what the Japanese do over there".

Questionable Research Methods

In Gro Ween´s ethnography from the Tana River in Norway, the fishers that fished along the river questioned the biological research methods. They were critical to "how the scientists know what they know?" (Ween, 2012). Similarly, many Tr'ondëk Hwëch'in would question the research on which the management strategy was based. Because the sonar station was used by DFO as the primary research instrument, it was especially vulnerable to critique. This does not mean that the Tr'ondëk Hwëch'in reduced biological science to one measuring instrument (the sonar), but simply that the sonar was solely employed to count salmon, and often got to represent "scientific" or "biological" knowledge.

One example of such critical views where done one day when we came in with a boat full of fish to the fish camp at Moosehide. With reference to the sonar and the harvest zones from DFO, one Elder asked rhetorically: "So there is no fish in the river?" Rather than trusting the sonar station, she would rely on her own experience from

engaging in the Chinook fishery. Others might believe that the sonar station could provide an indication of the number of fish, but that it was impossible for a sonar to get the numbers accurate. Some questioned Western science in general. Elder Angie Joseph-Rear explained that to be able to know about salmon, one would "have to have lived with it, have grown up with it, because salmon is a lifestyle, not something you can learn at school".

Immoral Behaviour

Some located the responsibility for the Chinook salmon decline on the fact that research methods and management strategies violated the Tr'ondëk Hwëch'in local morals and knowledge. One story from Elder Julia Morberg exemplifies this:

> "I will tell you something about salmon. One time some kids came down fishing, we fish, cutting it, drying it, you know. We found a big radio in stomach. I was so mad I cursed. DFO came down to Moosehide, big shots from Ottawa! I told them you damage our fish, put disease in our food. They do test fishery, put something in the stomach so that they can follow it on satellite. I said good thing we cut this one to put it out of his misery."

As explored in chapter five, catching a salmon without the purpose of eating it was considered to be a disrespectful act by the Tr'ondëk Hwëch'in. Taking a fish simply to investigate it and release it is tantamount to playing with the fish. To put a foreign element such as a chip in the fish body, to cut off the pelvic fin or to use an anaesthetic before an investigation were regarded as methods of disrespect. The fishing technique "Catch and release" similarly involved both fishing without the purpose of consumption and the release of a live fish. All Tr'ondëk Hwëch'in people I spoke to perceived this fishing technique as playing with fish, and therefore as being immoral. Neither of the actions described above should take place according to the Tr'ondëk Hwëch'in understanding of what sustainable salmon management should be. When the salmon is disrespected, the result might be that it stops giving itself to humans.

As shown in chapter five, to the Tr'ondëk Hwëch'in, an important aspect of respecting the salmon that gives it life to humans is reciprocity. I have especially stressed the need to share with Elders, and the oldest Elders. Tr'ondëk Hwëch'in people often suggested that the number of salmon they were allowed to catch according to the DFO, was often considered to be too low to satisfy community reciprocities. Seeing Elders

unable to eat salmon during the winter was stressed as one of the saddest things that could happen. Even though the Elders were assured salmon through the distribution by the Department of Fish and Wildlife, the amount of salmon they received was perceived as being insufficient for an Elder. The failure to maintain reciprocity could have far-reaching consequences, and ultimately make the salmon turn away from Dawson.

A Broader Environmental Change

Some Tr'ondëk Hwëch'in would agree that there was a decline in the Chinook population, but questioned what they viewed as the DFO's understanding of the decline as being a result of one single incident in history. Rather, they viewed the decline as a natural variation of the salmon stock. The fact that animal and fish stocks would cyclically change was an integrated part of the Tr'ondëk Hwëch'in knowledge. The decline was seen as a part of a greater change to which the world was entering. This change had been foreseen by their Elders, who had been speaking of a coming greater change for a long time. One Elder recalled a piece of advice she had heard from her grandmother in the 1970s: "There will be a great change. Get prepared. One day there will be no food in the stores". Because of the greater change that was approaching, many Tr'ondëk Hwëch'in thought it was particularly important to keep their local knowledge alive. When harder times would approach it was important to know how to survive on the land.

How Should the Chinook Salmon Run be Rebuilt?

Every summer, the Tr'ondëk Hwëch'in would practice co-management through the management of the amount of fish set out for First Nation harvest, or the "Basic Need Allocation" as determined by DFO. Within this number, the Tr'ondëk Hwëch'in had a dual approach to the conservation and rebuilding of the Chinook salmon stock: To limit fishing and to ensure salmon was treated according to the Tr'ondëk Hwëch'in notions of respect.

Through their *Final Agreement,* the Tr'ondëk Hwëch'in were the only people who could fish Chinook salmon legally, and thus the only people who could directly influence the number of fish that were harvested.[49] When going on subsistence fishery, the Tr'ondëk Hwëch'in were not given a certain amount to fish, as long as the catch was reported to the Tr'ondëk Hwëch'in Fish and Wildlife Department. My clear impression is

[49] In addition to the DFO´s establishment of the number of Chinook salmon allowed for the Aboriginal fishery.

that people planned to be conservative in their harvest during the summer´s Chinook salmon run. The concern that the future Tr'ondëk Hwëch'in children might not be able to engage in the salmon fishery at all was regularly repeated. People stated that as long as they could have a little salmon to share and eat during the following year, they would be satisfied. The Tr'ondëk Hwëch'in government further instituted catch restrictions on the Chinook salmon run, which will be explored in the next chapter.

The Tr'ondëk Hwëch'in stressed the importance of harvesting salmon according to the Tr'ondëk Hwëch'in morals on how to treat salmon with respect, as described in chapter five. A certain amount of salmon were planned to be fished exclusively to ensure that Elders would get Chinook salmon. Fishing for community potlatches, Elders and First Fish was a priority. Further, as described above, to respect the salmon, one should stay away from catch and research techniques that violated the Tr'ondëk Hwëch'in morals.

One way to respect the fish was to honour it in everyday life. This could mean doing beading with salmon-coloured beads, sharing a salmon meal, telling a salmon story, working toward more respectful management practices or applying norms when fishing. The Tr'ondëk Hwëch'in had a singing group, the Hän Singers, that performed at potlatches, at Moosehide and at the Dawson City Music Festival, among others. When we were gathered at Spring Camp in March, the Hän Singers came up with a new song, a song to help the Chinook salmon stock rebuild.

Before singing the song, a young Tr'ondëk Hwëch'in woman told the story of how the song had been made: Her aunt was fishing grayling one day, and she had wondered why she always had such good fishing luck. Then she noticed the quiet words that came from her aunt´s mouth, like a song. She also made a movement with her hand, a kind of a swimming movement or one that reflected floating water. The aunt was singing "Łuk Choo Anaih", meaning "big fish come" in Hän. -"So that´s why you always get so many grayling!" her niece busted out. "They like your song!" When the Hän singers met again at Spring Camp, the niece introduced this new song to the other singers. She suggested singing it might help bring the salmon back to the Yukon River, to encourage the salmon to swim on all the way up to Dawson, by singing: Łuk Choo Anaih/Hëe ä hoo/Drin Choo Anaih/Łuk Choo Anaih. In English translation the song would be: Big fish Come/Swim up here/Chinook salmon come/Big fish come.

View from the Retired Fishermen: Chinook Salmon Decline

Overfishing

Non-native retired fishermen similarly to the DFO and Tr'ondëk Hwëch'in said overfishing could have influenced the decline. The extended fishing that they themselves had taken part in in the 1970s and 1980s was held up as a likely reason. However, because the commercial fishery had been closed down, another reason presented was overfishing by the Alaskans. Like the Tr'ondëk Hwëch'in group, retired fishermen also suggested that there was a difference in the American and Canadian ways of thinking. In their perception, it did not matter much whether people were Alaskan First Nations or Alaskan non-First Nations. Canadians were viewed as being more modest and humble than Americans. They would explain their view on the two countries' foreign policies, where Americans were thought to be more aggressive. According to some of the fishermen, this world view was also reflected in salmon management.

Many of the retired fishermen had been involved in the negotiations of the Pacific Salmon Treaty. They had spent "16 years to educate the Americans", as one retired fisherman pronounced it. The further upriver one is, the earlier a person would notice the decline, one former fisherman explained, because there will naturally be more fish in the lower parts of the river. It was not until the catastrophic run in 1999 that the Americans would take the decline seriously, because that was year they saw it with their own eyes. However, even after signing the treaty, the Americans were suspected of not keeping their end of the treaty agreement.

Failed Management Strategies

According to the fishermen, the decline was seen as being the result of actions taken by DFO. When DFO first noticed the decline, these fishermen suspected that they had not reacted in the right way. Instead of focusing on the size, the DFO focused on numbers of fish. Regulations were based on numbers, meaning a fisher could fish a certain amount of fish, irrespective of the size of the fish. One fisherman asked rhetorically: "If you could catch a certain amount of salmon, would you rather keep the small or the big ones?" When the focus was only on numbers and not in size, people tended to favour keeping the biggest fish.

In previous years, a fisherman would catch a couple of very large salmon every season. According to the fishermen, these fish were the ones most likely to reproduce:

They would dig better nests with their bigger tails, and their eggs would be bigger, stronger and more likely to survive. The first sign that the fishermen got of a decline was when they noted that those big fish had become rare. All in all, the salmon tended to be smaller than before. Because salmon management had regulated number rather than size, the big fish had been taken out. The smaller fish laid weaker eggs that would be less likely to survive. The fishermen speculated, when the fish continued to become smaller and smaller, this pattern would repeat itself. Even if the fishing was restricted the last 13 years, the damage had already been done.

Questionable Research Methods

Similar to the fishermen in Tana (Ween, 2012) and the Tr'ondëk Hwëch'in, the retired fishermen in Dawson would ask how scientists knew what they knew. Some of the fishermen had worked for the DFO in the past to help them count the salmon in the river before the Eagle Sonar Station came into operation in 2007. They felt that whatever they tried to teach the scientists, their knowledge would not fit into the established scientific concepts and categories. When they told the scientists that something was happening to the salmon run, that there were fewer big fish in the river, the scientists would not listen to them because they were not interested in the size of the fish, only the population size. They questioned the fact that a university-trained biologist could know much about salmon merely by interpreting the data that came into the Eagle sonar station. One fisherman explained, "Everyone who fish in the Yukon River know that it is full of wood, floating trees and branches. We get them in our net all the time. The sonar sometimes count wood as fish."

Climate Change

Among former fishermen, global warming was seen as one reason for the Chinook salmon decline. Many people saw changes in their immediate environment, in their vegetable gardens. One man recalled that when he moved to Dawson in 1969, it was impossible to grow a garden. Since then, the growing season has gotten longer and longer every year. In 2013, they told me that the length of the growing season was the longest they had ever seen. In addition, the temperatures were warmer overall. Previously, there were very few summer nights in Dawson without frost, and all plants had to be covered during the night. In 2013, there were months with no frost during the summer and no covering was needed. Adding to this view on warmer temperatures were

perceptions about warmer winters and more precipitation, in the form of both rain and snow. One former fisherman explained that the health of the salmon run was a sign of how we treated the planet in general.

How Should the Chinook Salmon Run be Rebuilt?

One fisherman stated, "In English we have an expression: Hope springs eternal.[50] Well fishermen say, slime springs eternal." The fisherman acknowledged that he would probably never get the opportunity to fish like he had done before. He was getting older, had a desk job and thought he would probably never again have the energy to fish like he had once done. But he held onto the hope that the Chinook salmon would one day come back.

He shared his hopes with the other fishermen. In contrast to the Tr'ondëk Hwëch'in and the Canadian bureaucracy, the retired fishermen had no formal influence on the management of Chinook salmon. They could influence the management through advisory committees, and most of them had participated in the Yukon Salmon Sub-Committee at some point in time. However, the experiences from this work did not convince them of their ability to change the management strategies. One fisherman explained it in the following manner:

> Let's say everybody agrees there´s a problem with the size of the fish, and you want to change fishing techniques to protect the large fish, you have to change the laws, convince the law makers, must explain to them what the problem is and how your solution will fix it (...) The scientists need to know the outcome, they only count the number of fish. What´s the difference? Our knowledge is hard to use for those kind of management regimes.

Ensuring the biggest fish would spawn was held as especially important for rebuilding the Chinook salmon run. They had seen how the Chinook salmon run declined just after the disappearance of the biggest fish. However, as they had experienced in the past, the fishermen did not believe any change would take place when conveying the issues they found problematic in the river to the bureaucratic scientists.

Most of the retired fishermen also stressed the need to close down Chinook fishery entirely to rebuild the run. "If we leave it long enough, the run would rebuild. But it would probably be decades", one fisherman explained. Others stressed the need to

[50] An idiom meaning: "People will continue to hope even though they have evidence that things cannot possibly turn out the way they want." Cited from http://idioms.thefreedictionary.com/Hope+springs+eternal

keep people involved in fishing to make people care about the salmon, similar to the governmental rationale from above. Because of their lack of influence, and the scepticism about work in advisory committees, the fishermen did not believe it was realistic to make people forego or even limit their fisheries all along the Yukon River. They were left with the hope that "slime springs eternal".

When Knowledges Meet

All three groups agreed on the following reasons for the decline of Chinook salmon: overfishing, environmental change and failed management. The rationales behind the reasons were sometimes different, however, as long as the desired outcome was similar, management actions were agreed upon. The Tr'ondëk Hwëch'in people were left to believe that immoral behaviour was one reason behind the decline. If we look further at what was actually invested into management actions, is it possible to claim that all the different views were heard and acted upon? What do these views reveal about the power structures inherent in co-management?

Described above are people´s opinions about the decline of Chinook salmon and the management of the stock. Their views might also be viewed as expressions of the process of knowledge to become "realer or less real", in John Law´s words (Law, 2004: 3). This can be seen as a struggle over what will count as knowledge, or as *ontopolitics*. We will have to investigate the role of power inherent in the process of becoming knowledge, as described in chapter one. What counted as knowledge and what did not count as knowledge in Dawson? I will focus on the point where the views did not correspond, that is, how immoral behaviour led to the salmon decline.

As showed in this chapter and in chapter five, DFO relies on numbers of fish to determine management actions, as counted by the sonar station. A view that contradicts the DFO focus on numbers was expressed when the manager of the Tr'ondëk Hwëch'in Fish and Wildlife Department addressed the immorality of "Catch and release" at the Yukon Salmon Sub-Committee meeting in May. She stressed that salmon was a sentient being that should avoid such treatment of pain and disrespect. After the speech, no discussion rose about whether "Catch and release" should be excluded from management. She was thanked for sharing her view and the meeting continued.

The example was one of many in which I met concerns from First Nation people about the immorality of "Catch and release". Despite these protests, no initiatives on how

a potential ban on "Catch and release" should be carried out were carried out by DFO. This indicates that there was no real intent to further this request, as long as "Catch and release" studies showed that up to 95 percent of the released salmon survive. What is shown here is an example of one type of knowledge that has survived into the making of legitimated knowledge, while another type of knowledge still struggles to "become more real".

As Nadasdy argue in *Hunters and Bureaucrats,* biologists must answer to the community of biologists. They can only do so by applying methods that are appropriate within the discipline of biology. If they fail to do so, they will be contradicted by biologists potentially working towards endeavours with contradictory incentives, for instance, a biologist working for the commercial fishing industry. Their strategy will quickly be claimed to rest on "unscientific" data. If they start to incorporate subjective, local views into their work, if they speak about salmon as a sentient being, they simply risk losing their jobs. As long as the management of salmon is given a scientific form that connects scientific knowledge to the management of salmon, only views that correspond to the biological language have the opportunity to be incorporated into management strategies. A knowledge that contradicts the bureaucratic knowledge can never actually make it into management because biologists and state bureaucrats cannot act upon these types of information (Nadasdy, 2003: 111-112). Contradictive accounts are *unthinkable,* in Foucault´s words (Foucault, 1980).

When the leader of the Fish and Wildlife Department expressed her concern about "Catch and release", she did so in a setting that resembles those used by the state agents: Inside a meeting room, using desks, PowerPoint and notes. It was not expressed while being *on the land*, on the river fishing or in a story. It is hard to imagine that all participants in a co-management meeting would sing the salmon song together to help rebuild the Chinook salmon run. The fact that one type of knowledge is expressed in the surroundings and language used by another type of knowledge reveals structures of discursive power.

As showed above, the numbers from the sonar station might not be looked upon as reliable from the perspective of a sonar station employee, and bureaucratic agents all agreed on the uncertainty inherent in the discipline of biology. However, when the sonar data are employed, they are acted upon as being accurate. The sharp divide between management zones proves this fact. The number of Chinook salmon that are counted at

the Eagle sonar station is acted upon as being absolute. It goes unquestioned whether the sonar station might have counted 500 sticks or 500 early Chum salmon, which would make the number of salmon inexact and thus the subject of a different management zone or raise challenges in determining which zone management to employ. As argued with Foucault (1980), that the power to shape the circumstances where people act can be as powerful as the legislative powers. In possessing "real knowledge" one is never forced to question the science applied by the holders of structural power. On the contrary, the subjective knowledge from a local might be questioned as "more or less real".

Conclusion

This chapter has explored the different views on why the Chinook salmon has been in decline, and what should be done to rebuild the run. I have showed how the views about salmon management both resembled and contradicted. Through an investigation of a point where the views contradicted, I argued, following Wolf and Foucault, that structures of discursive power were revealed. Concerns about salmon management had to be expressed in rationales that did not challenge the biological and bureaucratic focus on numbers. This does not mean that the retired fishermen and the Tr'ondëk Hwëch'in did not believe a focus of number was important regarding salmon management, or that they limited the biological knowledge to only contain the data of the sonar station. It states that additional concerns about the salmon, that is, a focus on the size of the salmon and the salmon as a sentient being that must not be played with, were "distributed" in the words of Annemarie Mol, by the state agents. The contradictive views were welcomed in discussions and meetings, but were never taken into consideration when salmon management were established. This chapter has explored the views about salmon management. The next chapter will explore the management carried out by the DFO and the Tr'ondëk Hwëch'in when the salmon arrived in Dawson in July 2013.

Chapter Seven: Management and Co-Management of Chinook Salmon

At the Yukon Salmon Sub-Committee meeting in Dawson in May, a DFO employee revealed that the 2013 estimated border escapement for Chinook salmon ranged between 49 000 and 71 000 fish. The determination of allocation categories would be sorted under the yellow management zone, as described in chapter five. This allowed the First Nation harvest in Yukon to range between 1495 and 6555 Chinook salmon. Out of this, the Tr'ondëk Hwëch'in could fish up to 1500 Chinook salmon. Domestic fishery, commercial fishery, recreational fishery and even governmental test fishery would be closed.[51]

In the Tr'ondëk Hwëch'in organisation, the Fish and Wildlife Department was responsible for the management of the salmon harvest. Many people referred to the issues concerning salmon to be one of the most important to the Tr'ondëk Hwëch'in organisation in 2013. Salmon management would be discussed at the highest organisational level, at the annual General Assembly. Prior to this meeting, the Elder´s Council had discussed the management strategy for Chinook salmon and passed an advisory proposal to the General Assembly.

The Tr'ondëk Hwëch'in government established a restrictive approach to the Chinook salmon fishery. In March, the Tr'ondëk Hwëch'in General Assembly passed a proposition for a voluntary closure of the Chinook fishery for one salmon life cycle – eight years. In this proposition, the voluntary closure would mean that "the custom of harvesting Chinook salmon can only be practiced for potlatches, First Fish as well as community meals, while the reduced harvest helps to maintain and hopefully increase the population in future years".[52] This statement created a uncertainty that led the Tr'ondëk Hwëch'in government to provide a further explanation in the following newsletter:

[51] 2013 Yukon River Management Outlook: 5
[52] Tr'ondëk Hwëch'in newsletter, 2013 (1): 5

> In the interest of clarity, the General Assembly agreed in March to a voluntary closure of the Chinook salmon fishery. Fishers are encouraged to lighten or forego their catch this season, but not required to. The General Assembly also supported the continuance of harvesting for cultural events such as First Fish, Elders' and community lunches, and potlatches. We apologize for any confusion.[53]

A man from the Tr'ondëk Hwëch'in government explained that they wanted to encourage people to limit their fishing as much as possible, but not take away the opportunity to harvest Chinook salmon entirely. They were aware of the state of the Chinook salmon run at the same time, they acknowledged the special importance that Chinook salmon had to their people. The management strategy was an attempt to balance these two factors. The Tr'ondëk Hwëch'in government would not establish a certain amount of fish that one person could fish for subsistence use, rather, they encouraged their people to be modest and take the voluntary closure into consideration. All subsistence fishers had to report the catch to the Tr'ondëk Hwëch'in Fish and Wildlife office, which again reported to DFO in Whitehorse.

Dolores has caught a Chinook salmon

The majority of the Tr'ondëk Hwëch'in I spoke to accepted the voluntary closure, and planned their fishing thereafter. Those who would be most likely to restrict their fishing were the Tr'ondëk Hwëch'in government employees, as they wanted to fish according to the management strategies they had made at work. A few told me they would not take the voluntary closure into consideration, as they thought the salmon belonged to them, and that it was their right as First Nation people to fish for Chinook salmon.

[53] http://www.trondek.ca/downloads/TH%20e-Summer%202013.pdf

First Fish at Moosehide

The In-Season Management of Chinook Salmon

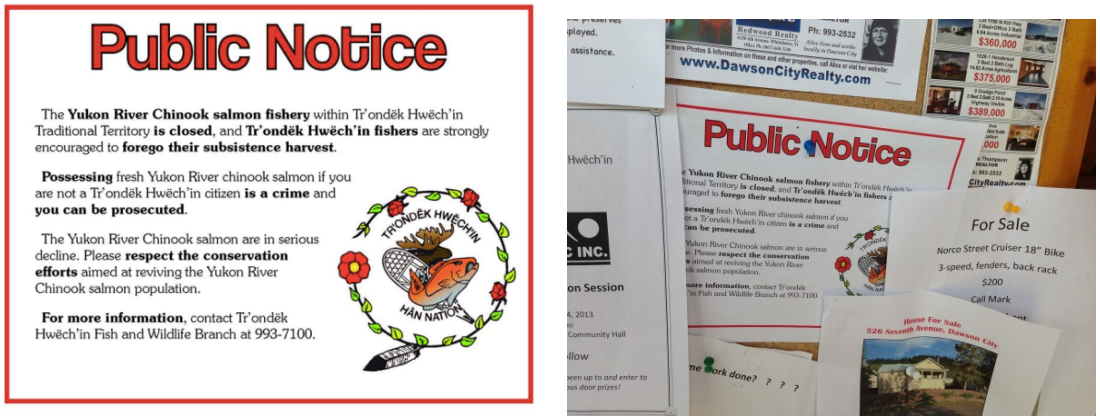
Who could fish the 1500 salmon that were available to the Tr'ondëk Hwëch'in during the Chinook salmon run? When the first Chinook salmon arrived in Dawson in July 2013, 15 Chinook salmon were set off to fish at "First Fish". The camp gave the community´s youth a chance to get involved in the Chinook fishery, regardless of their family background (non-First Nation youth could participate). The purpose of the camp was overall educational, or a way to transmit knowledge about salmon to youth despite the salmon decline.

One hundred Chinook salmon were reserved for The Fish and Wildlife Department to distribute to Elders and community events. As shown in chapters five and six, reciprocity should be included in the management of Chinook salmon. It was especially important to provide Elders with salmon. The Fish and Wildlife Department ensured that every Elder would get at least one salmon each. In addition, these salmon were used on the "meals on wheels" program for the community´s Elders who could not

cook for themselves. Two of the fish would be distributed to the entire Dawson community at the "First Fish Community Dinner". The rest of the Chinook salmon would be frozen and saved for community celebrations, potlatches and lunches throughout the next year.

To the Tr'ondëk Hwëch'in, a part of the management strategy to keep a healthy relationship with the salmon is to treat it with respect, as shown in chapter five. The Tr'ondëk Hwëch'in norms applied at every level of the Chinook fishery. The only time these norms were spoken about was at "First Fish", when the youth were meant to learn from the Elders. When the Department of Fish and Wildlife and other individuals went fishing, these norms seemed embedded in every step of the process. They never joked or played with the salmon. They cut it in the same way. They kept the camp clean at all times. They never stepped on the fish or the blood, but treated the parts carefully.

Twenty Chinook salmon were fished at "First Fish" between the 15th and 19th of July, and 85 by the Fish and Wildlife Department. When the individual subsistence fishery had been taking place for about three weeks, a teleconference between DFO and the Fish and Wildlife department decided to encourage people to pull their nets entirely and cease in fishing Chinook salmon. The Eagle sonar station had revealed that only 30 750 fish had passed the Canadian border, which was lower than other recorded run in the past, putting the guideline harvest close to the red zone where even the First Nation Fishery would be closed. On the 8th of August, a public notice was posted online and on boards in Dawson stating the following: "The Yukon River Chinook salmon fishery within the Tr'ondëk Hwëch'in Traditional Territory is closed, and Tr'ondëk Hwëch'in fishers are strongly encouraged to forego their subsistence harvest."



The Public Notice in print and at the general store board

The public notice was efficient. My impression was that everybody respected this message from the Tr'ondëk Hwëch'in Fish and Wildlife department and I observed no fishing after the 8th of August. The nets were pulled and the Chinook salmon fishery in 2013 had come to an end.

When Knowledges Meet: Co-Management

This chapter has showed that DFO planned their management strategy based on numbers, specifically, the anticipated Chinook salmon counted at the Eagle sonar station, and later reviewed the management strategy based on numbers (the low numbers of salmon made DFO close the Aboriginal fishery). The Tr'ondëk Hwëch'in must act based on the official language, which they did. They accepted the fact that the number within the "Total Allowable Catch" category determined their share of salmon. They further acted based on numbers of fish when they determined to put a voluntarily closure on fishing. Finally, they ceased from fishing based on the low number of Chinook salmon.

Within the amount of salmon established as Aboriginal harvest, the Tr'ondëk Hwëch'in had an opportunity to determine a form of management in accordance with their view on how salmon should be treated. They could carry out their fishing in a proper Tr'ondëk Hwëch'in way, and maintain the reciprocity system, at least to a certain degree: In providing the oldest Elders with salmon, preparing a meal for the Elders and later the community to share the first fish, getting involved in fishing on a personal level and finally being able to teach their children and youth about proper human-salmon relations at First Fish. However, the Tr'ondëk Hwëch'in were only able to harvest salmon because the number of fish fell into the yellow management zone. It was only if the *number* of salmon was high enough that the Tr'ondëk Hwëch'in would be able to fish at all.

After three weeks of subsistence fishing, DFO put all fishing to an end. DFO has the ultimate responsibility for salmon management and determines the number allowed for the First Nation fishery. If they determine that the number is not high enough, the number will supersede the Tr'ondëk Hwëch'in management strategies: reciprocity as well as the need to accept the salmon gift. If the sonar station counts less than 30 000 fish, the Aboriginal Fishery will be closed. Any Tr'ondëk Hwëch'in will then be subject to the same sanctions as non-First Nation people. If they harvest a salmon, they will be

fined 100 CAD for the violation of the regulations, and 50 CAD for each fish caught.[54] The Tr'ondëk Hwëch'in have no legal power to ignore the management zones or the sanctions. This is one of the premises on which co-management is based. Co-management in this case means that DFO determines whether the aboriginal fishery will be open or closed, and how many salmon are allowed for First Nations to fish.

Paul Nadasdy argues that in Kluane society, to "hunt" or to "fish" involves more than just the act of hunting and fishing. When the Tr'ondëk Hwëch'in is given the right "to fish", this fishing is in fact to exclude them from what constitutes an important part of fishing to the Tr'ondëk Hwëch'in: sharing the fish. This process is one of "distillation" of First Nation knowledge, according to Nadasdy (Nadasdy, 2003: 243). The fact that the aboriginal fishing had to be for "subsistence" meant that fish could only be given away as a gift to other First Nation people. However, it was customary for a Tr'ondëk Hwëch'in to share meat with those who had helped in either fishing or hunting, as had been the practice for a long time. When I participated in fishing, I at least tried to help out: pulling nets, cutting salmon and cleaning. But at the end of the day, because of my Norwegian origin it was illegal to reward me with the piece of salmon meat that was given out to all others who had participated. The "subsistence" category made the Tr'ondëk Hwëch'in refrain from sharing the harvested meat with everyone who had helped in the fishery. This in itself was a violation of the reciprocity system. Sharing is not included in the Euro-Canadian version of the concept "to fish".

Not only does this confirm to the legal powers held by the Canadian state, which are absolute. It also points to the structural power held by the Canadian government to shape the context in which conversations about salmon management take place. As long as any concerns are expressed in numbers, they will have a chance of being taken into consideration. It could not be argued that the fishing of Chinook salmon should continue because some of the Elders had not yet gotten enough fish. Nor could it be held that the ravens had not gotten enough salmon intestines or that fishing could continue because the salmon´s "leaders" had already passed. These rationales were *unthinkable*, to use Foucault's words. The *unthinkable* was kept away from the teleconference between the Tr'ondëk Hwëch'in and the DFO where the Chinook fishery was closed, by a focus solely on numbers. This indicates that the *unthinkable knowledge,* was treated, as was the case in Blasers report from Paraguay, as "culture" rather than "science". The science of the

[54] Yukon Fishing Regulations Summary, 2013: 20

"other" was reduced to be irrational or based on error, rather than being treated as a distinct intellectual discipline, as Cruikshank and Agrawal have suggested (Cruikshank (1981, 2005), Agrawal (1995)).

Conclusion

Prior to the Chinook salmon run, the DFO established that the run of 2013 would be placed within the yellow management zone. The Tr'ondëk Hwëch'in allowable catch was set to be 1500 Chinook salmon. Within this number, the Tr'ondëk Hwëch'in harvested salmon according to their notions about salmon and respect, as explored in chapter five. However, the Tr'ondëk Hwëch'in ultimately acted upon the language of numbers when involving in the Chinook fishery. When the DFO determined that the number of Chinook salmon was too low and that the harvest limit was reached, they put an end to the fishery.

This reveals the legislative power held by the Canadian bureaucracy. It also shows the discursive power held by the Canadian bureaucracy, that is, the ability to make people speak, think and act upon *numbers* of Chinook salmon.

Chapter Eight: Conclusion

I started this thesis with the promise to look at different knowledges about salmon and what would happen when they met and interacted in the context of management of a significant species, the Chinook salmon. Throughout the text, I have showed that the view on what a salmon is and how it should be treated depend on whether a person are of Tr'ondëk Hwëch'in or non-First Nation origin, or employed in the state bureaucracy. I claimed that these differences were ontological, they were different ways of enacting nature. This is the view of multinaturalism. Because the differences are ontological, I showed in chapter five, following Ween, Riseth and Ingold, that any attempt to translate the knowledges into each other have a very limited possibility to succeed.

As Nadasdy have argued, co-management is based on the premise that two sets of knowledges can be incorporated to make up a common set of management strategies. However, as Nadasdy argued in the case of the Kluane people, the categories of knowledge discussed in this thesis were never treated as two equal sets of knowledge. The Canadian bureaucracy held the discursive power to shape the circumstances where social interaction took place. They defined the understanding of salmon through a solely focus on numbers, on which both the retired fishermen and the Tr'ondëk Hwëch'in had to act upon.

This thesis has revealed several attempts to pronounce the views that contradicted the focus on numbers: The protest of compartmentalisation of water (and salmon), the protest against "Catch and release", the protest of research carried out in disrespectful ways, the protests against the uncritical use of the numbers from the sonar station instead of a focus on size. I have shown that any attempt to protest the bureaucratic knowledge was "distributed", in the words of Annemarie Mol, that is, they were kept apart by space. This indicates that rather than treated as science, these accounts were acted upon as culture, counter from the suggestion from Cruikshank and Agrawal. I showed this through the examples from the views on salmon management, the management and co-management of Chinook salmon and at the YSSC meeting in May. This indicates that Latours "Modern Constitution" allows for the representatives

from the bureaucratic knowledge in Dawson to treat other types of knowledge as non-modern, irrational or based on error. Which knowledge that is counted as "real", indicate the structures of structural power, in the case from Dawson the structural power was held by the Canadian bureaucracy.

I argued with Nadasdy, Ween and Asdal that the bureaucratic management of salmon in Dawson was given a scientific form through the use of numbers, graphs, articles and harvest zones. The language of state bureaucracy in Dawson resembled that of the biological discipline. This is why the biologist and state agents cannot act upon any knowledge that contradict the biological rationale.

It can be argued that, as Nadasdy has suggested, the Tr'ondëk Hwëch'in will change their thinking into uncharacteristic ways when the only language that are listened to is the language of numbers. It is revealing that the Tr'ondëk Hwëch'in government have applied a similar compartmentalization by the creation of different departments that resemble those to the Canadian state. However, whether the Tr'ondëk Hwëch'in have changed or will change echoes the discussion about indigenous knowledge being traditional and the struggle of Indianness. It questions the Tr'ondëk Hwëch'in community´s ability to change into what they chose to be best for them.

Finally, this thesis has revealed how the nature/Native metonym holds significance also in processes of co-management and the making of wilderness in the Yukon. This metonym allows for the exclusion of non-First Nation people as "nature" knowledge holders, in this case the retired fishermen. The thesis has thus explored not only the meetings between knowledges, but also the non-meetings of knowledges, that is, when non-First Nation knowledge about nature was eliminated and overlooked from the Chinook salmon management and co-management processes.

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